4 Changes in Environmental Effects and Mitigation

This addendum presents updated information to identify or address impacts that have changed since the 2009 Draft and Final SEISs were prepared for the County's GMA Comprehensive Plan. Mitigation measures, including those in the 2009 Final SEIS, are recommended, where appropriate, and the potential for unavoidable significant adverse impacts is noted.

The County identified areas in which the BSRE Point Wells docket proposal would be evaluated in this addendum. Elements of the environment that are addressed include Earth, Hazardous Materials, Water Resources, Wetlands, Fisheries, Wildlife and Vegetation, Air Quality, Cultural Resources, Aesthetics, Transportation, Public Services and Utilities, and Land and Shoreline/Recreation Use Patterns. This chapter incorporates text and information from the 2009 Draft and Final SEISs (ICF Jones & Stokes 2009a, 2009b).

Description of the Point Wells Site

The approximately 61-acre Point Wells site is located on the shore of Puget Sound just north of the King-Snohomish county line. The property borders the City of Shoreline and the Town of Woodway. The BNSF railroad tracks run north-south along the east edge of this site. The majority of the site formerly consisted of a saltwater marsh that was filled in the early 1900s for industrial use primarily as a petroleum storage and distribution facility. The site is still used as a marine fuel terminal as well as an asphalt plant. A series of steel sheet pile seawalls and rock bulkheads have been constructed along the shoreline to retain the fill and protect the site from wave erosion. About 56 acres are located adjacent to Puget Sound where the land is about 10 to 20 feet above sea level behind the seawall; this area is also referred to as the lower bench. The remaining 5 acres on the east side of the railroad tracks are about 50 feet higher in elevation. There are steep slopes along the east side of this upper bench area.

4.1 Earth and Soil and Groundwater Contamination

4.1.1 Affected Environment

The Puget Sound area is a seismically active region. There are no known faults that run directly through the Point Wells site; however, much of the Point Wells site was a saltwater marsh that was filled in the early 1900s. The fill is highly susceptible to liquefaction in an earthquake.

Steep slopes along the east edge of the site are considered to be a landslide hazard area.

Groundwater beneath the lower bench area of the site is generally 1 to 8 feet below the ground surface. Shallow groundwater flow is interpreted to be from east to west, toward Puget Sound. The groundwater is influenced by precipitation. Tidal influences to groundwater levels have been minimized by the construction of sheet pile seawalls.

Further details about the geologic setting, soil types, groundwater conditions, and geologic hazards are described in Section 3.1 of the Draft SEIS.

4.1.2 Impact Analysis

The Alternative Action would likely have fewer impacts compared to the 2009 Proposed Action discussed in the Draft and Final SEISs because the intensity of development would be less. These potential impacts would depend on the configuration of future development proposals.

The Point Wells site is known to have petroleum contamination in the soil and groundwater. The property is listed on the Washington State Department of Ecology (Ecology) Confirmed and Suspected Contaminated Site List. There is a groundwater pump and remediation system that operates on the property to treat the petroleum contamination in the groundwater. Ecology has also documented four significant spills over the history of the site. Details are described in Section 3.1 of the Draft SEIS.

Future site development activities, such as excavation and grading, would increase the potential for public exposure to known soil and groundwater contamination during construction. Additionally, any affected soils encountered during construction would require an evaluation, characterization, and possible remediation. Remediation of these soils could include excavation and on-site treatment or off-site disposal. The type of impacts would be the same as described for the 2009 Proposed Action in Section 3.1 of the Draft SEIS. Both the Alternative Action and the 2009 Proposed Action would clean up contamination on the entire site to residential standards.

No permanent earth, soil, or groundwater impacts are anticipated as a direct result of the Alternative Action. The requested zoning change would allow for development of housing, commercial space, retail businesses, public recreation areas, and a transit center. This development would occur largely on the area that has been filled. Fill has the potential to liquefy in the event of an earthquake. Landslides are possible along the steep slopes on the east side of the property.

With the No Action Alternative, the proposed zoning changes would not take place. The current land use designations prohibit residential or commercial structures; however, industrial activity at the site would likely increase even if the future land use map designation is not changed (ICF Jones & Stokes 2009b).

4.1.3 Mitigation Measures

Earth

Any project-specific geotechnical and geologic analyses would need to be performed at the time of permit application to evaluate the impact of seismic, erosion, and landslide hazards. Any future development must be consistent with applicable regulations such as chapters 30.63B SCC (Land Disturbing Activity), 30.63C SCC (Low Impact Development), 30.62B SCC (Geologically Hazardous Areas), and 30.62C SCC (Critical Aquifer Recharge Areas). The proposed design would need to provide for setbacks from the landslide hazard areas in accordance with County requirements. The potential for seismically induced liquefaction would need to be evaluated and may need to be mitigated through the use of appropriate

foundations. Modifications may also need to be made to the existing seawalls and rock buttresses to bring them to current code (ICF Jones & Stokes 2009b).

Similarly, if industrial activities under the No Action Alternative include construction of additional structures, project-specific geotechnical and geologic analyses would need to be performed to evaluate the impacts of seismic, erosion, and settlement hazards (ICF Jones & Stokes 2009b).

Soil and Groundwater Contamination

Soil and groundwater contaminants present on the Point Wells site at concentrations above the Model Toxics Control Act (MTCA) cleanup limits include total petroleum hydrocarbons (gasoline, diesel, and oil range); benzene, toluene, ethylbenzene, and xylene compounds; and lead. Soil and groundwater sampling and characterization activities are ongoing.

Mitigation measures would be the same as described in Section 3.1.2 in the 2009 Draft and Final SEISs (ICF Jones & Stokes 2009a, 2009b) and could include:

- Continuing the existing soil sampling program to identify and characterize the extent of soil contamination on the site;
- Developing a plan to remediate contamination identified by the soil sampling program; depending on conditions encountered at the site, remediation methods such as excavation, segregation, and/or capping of affected soils may be necessary;
- Evaluating the potential for soil vapor intrusion associated with volatile contaminants, such as benzene, and associated cleanup required by Ecology before development can occur;
- Assessing the need for an off-gassing or a subsurface vapor collection system;
- Continuing the existing groundwater extraction and treatment system operations and evaluating technologies to increase cleanup efficiencies; and
- Instituting controls to prevent future use of site groundwater for drinking water or irrigation purposes.

4.1.4 Significant Unavoidable Adverse Impacts

Earth

No adverse impacts are anticipated for geologic resources or critical areas.

Soil and Groundwater Contamination

No unavoidable adverse impacts are expected with any of the alternatives. Ecology would require that soil and groundwater remediation and characterization activities continue for the No Action Alternative (ICF Jones & Stokes 2009a).

4.2 Water Resources (Surface Water, Water Quality, and Drainage)

4.2.1 Affected Environment

The Point Wells site has approximately 3,500 feet of shoreline along the western boundary of the site. The site is located in the Cedar/Sammamish Water Resource Inventory Area (WRIA), which is WRIA 8. The site drains directly into Puget Sound. There is a small unnamed creek that enters the site near the southern end from the steep hillside to the east and then passes through the site in a culvert and discharges into Puget Sound. A constructed ditch along the northern boundary and the northern half of the eastern boundary discharges to Puget Sound and appears to mainly convey runoff and groundwater seepage from the steep hillside to the east of the site. Figure 4.2-1 shows the topography of the Point Wells site, the unnamed creek that enters the site near the southern end, and the constructed ditch along the northern and eastern boundaries.

Along the western edge of the Point Wells site is a strip of tidelands that is located in a special flood hazard area, which is below an elevation of 10 feet. No buildings would be constructed in the tideland area.

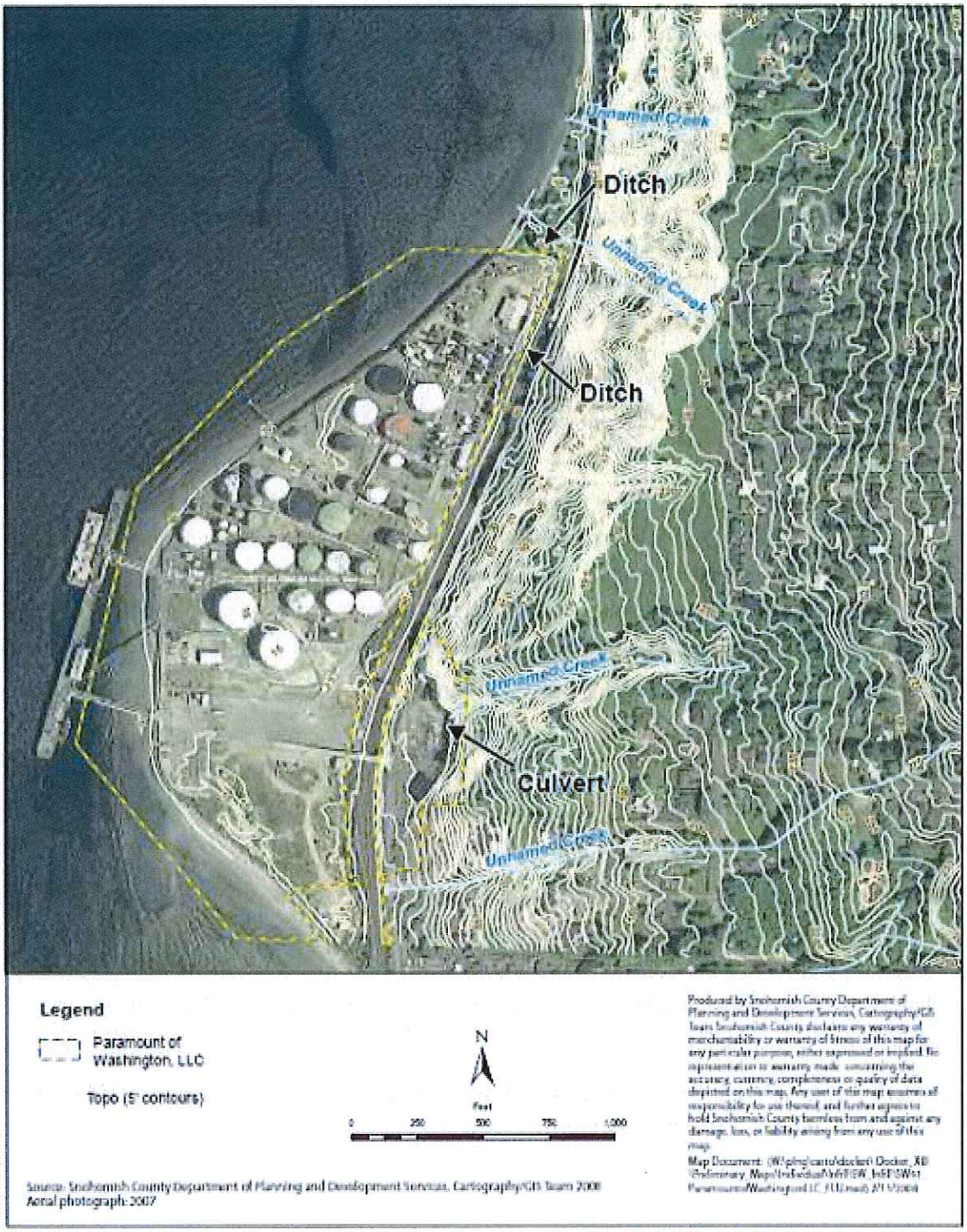
In the vicinity of the Point Wells site, Puget Sound is on Ecology's 2008 303(d) list of threatened and impaired water bodies due to fecal coliform bacteria (Category 5) (Ecology 2008a). However, samples tested in 2008 did not exceed the criteria for fecal coliform. In addition, Ecology's Proposed 2010 Category for this area is a Category 1, which meets tested standards for clean water (Ecology 2010). As of April 16, 2012, the U.S. Environmental Protection Agency (EPA) had not yet approved the 2010 water quality assessments.

Most of the site is already developed and has impervious coverage. Stormwater runoff is routed through oil/water separators and then through a Quadricell® Induced Air Flotation Unit prior to discharging into Puget Sound. A flocculant is added to the stormwater runoff during treatment to promote removal of solids.

The outfall for the Brightwater regional wastewater treatment system is located on the southeast corner of the Point Wells site. King County owns approximately 1 acre of uplands and some adjoining tidelands. King County will be granted a permanent maintenance access easement through the Point Wells site to its outfall property. This would not affect the Snohomish County Comprehensive Plan or code amendments.

Further details about the water bodies, flood hazard areas, and Section 303(d) of the federal Clean Water Act are provided in Section 3.2 of the Draft SEIS.

Figure 4.2-1.
Topography and Drainage Map - Point Wells



ICF Jones & Stokes

Figure 4.2-1
Topography and Drainage—Point Wells

4.2.2 Impact Analysis

Impacts with the Alternative Action would be similar to but somewhat less than those discussed for the 2009 Proposed Action in Section 3.2 of the Draft and Final SEISs. Because the intensity of development would be less, the amount of impervious surface may be reduced compared to the 2009 Proposed Action. The potential impacts would depend on the configuration of future development proposals. The change in the number of housing units and uses with the Alternative Action are not likely to change the type of impacts on surface water, water quality, and drainage.

Currently, more than half of the Point Wells site consists of impervious surface area. With the Alternative Action, changing the land use designation and zoning would allow for future development of up to 1,800 residential dwellings, and approximately 135,000 square feet of office and retail development. The future development of the site could increase the amount of impervious surface area on the site, which would increase stormwater runoff. All runoff from future development would require stormwater treatment in accordance with SCC 30.63A.210. Stormwater treatment for any future site development would meet the current standards and could improve the quality of the stormwater runoff compared to existing conditions. These standards are substantially more stringent than water quality standards applicable to the current site, which were developed under previous standards.

The current treatment standards required for future development by SCC 30.63A.210 remove pollutants more efficiently than the existing best management practices (BMPs) at the site. If the stormwater treatment BMPs for future development are correctly designed according to County standards, less degradation of water quality to the receiving water body would result from the Alternative Action as compared to existing conditions.

The site currently discharges directly into Puget Sound with limited water quality treatment. Future development with the Alternative Action would be expected to continue direct discharge, but meet higher treatment standards under SCC 30.63A.210 (1) (b) (iii). This code classifies Puget Sound as a water body in which direct discharge without detention is allowed; however, water quality treatment BMPs are still required to remove pollutants. Because the treated runoff would discharge directly into Puget Sound, there would be no increased flooding in the small stream on the site.

The No Action Alternative could increase the intensity of the current uses and further development on the site, particularly the less intensively developed southern portion of the site. Only runoff from newly developed impervious surfaces would receive stormwater treatment according to SCC 30.63A.210. This treatment would result in lower quality stormwater discharge as compared to redevelopment with the Alternative Action.

4.2.3 Mitigation Measures

Any future development must be consistent with applicable regulations such as chapters 30.63A SCC (Drainage), 30.65 SCC (Special Flood Hazard Areas), 30.43C SCC (Flood Hazard Permits), and 30.62A SCC (Wetlands and Fish & Wildlife Habitat Conservation Areas).

Specific impacts and appropriate mitigation measures for any development plans would be addressed by the applicable environmental documentation and follow SEPA regulations.

Development for any alternative may require mitigation as identified in the Final EIS for Snohomish County GMA Comprehensive Plan 10-Year Update (Snohomish County 2005a) including:

- Encouraging the use of drainage systems that mimic natural drainage systems, such as vegetated swales, wet ponds, and created wetlands;
- Adopting more protective water quality standards, such as more protective requirements for water quality BMPs;
- Reducing impervious surface area by adopting new development requirements that set maximum limits on the percentage of impervious area allowed and increasing the infiltration of surface water (low impact development regulations); and
- Implementing stormwater quality monitoring to evaluate the effectiveness of stormwater practices and standards.

In addition, mitigation measures associated with any future development may include:

- Improving the ditch along the north and eastern boundaries of the site to create a channel that mimics a natural creek; and
- Removing the culvert that conveys the unnamed creek in the southern portion of the site, and restoring the natural channel through the site for that creek.

Because of the extensive industrial development already on the site and existing adverse impacts on surface waters, it is likely that mitigation measures associated with development for the Alternative Action would lead to an overall improvement of surface water quality runoff compared to existing conditions.

4.2.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts on surface water are anticipated as a result of the Alternative Action or the 2009 Proposed Action.

4.3 Wetlands

4.3.1 Affected Environment

Two wetland areas mapped by the National Wetlands Inventory (NWI) have been identified in the vicinity of the Point Wells site. The NWI mapped one estuarine intertidal wetland on the western edge of the site. This area is where the tides alternately flood and expose the land surface along the seawall. The second NWI-mapped wetland is a palustrine forested wetland that is temporarily flooded along the northern portion of the site. This wetland is mapped as being outside of the site boundary; however, the actual wetland boundary has not been delineated. Depending on the location of the delineated boundary and the classification of the wetland, the wetland buffer may extend onto the Point Wells site.

One additional potential wetland was observed on the northeast portion of the parcel along the railroad tracks during the 2008 field reconnaissance. The potential wetland has not been delineated. This wetland is along a linear drainage ditch that conveys water from the hillside along the eastern side of the railroad tracks into Puget Sound. This ditch is currently routinely excavated to remove accumulated sediment and to prevent flooding of the railroad tracks.

Neither the NWI wetlands nor the potential wetland have much natural buffer due to the disturbed site conditions. Any future site-specific development proposal would require a wetland delineation and further environmental review to assess the extent of wetlands on the site, to classify wetlands, and to determine how the critical area regulations would affect the Alternative Action. Prior to site-specific analysis, the wetlands/potential wetland on the site cannot be classified.

Information sources, critical area regulations, and buffer requirements for wetlands are described in Section 3.3 of the Draft SEIS.

4.3.2 Impact Analysis

The Alternative Action would have similar impacts as the 2009 Proposed Action discussed in the Draft and Final SEISs. The potential impacts would depend on the configuration of future development proposals. The change in the number of housing units and uses in the Alternative Action is not likely to change impacts on wetlands.

With the Alternative Action or 2009 Proposed Action, any future development application would be required to meet the County's critical area regulations (chapter 30.62A SCC) for wetlands or wetland buffers.

All alternatives would be required to meet the County requirements for buffer preservation and provision of buffers. The extent of impacts on wetlands would be determined at the time of a project-level environmental review. Wetlands and buffers within the site would limit development in those specific areas.

If development is proposed within a wetland or buffer, compensation for resulting impacts would be required by SCC 30.62A.340. Development would probably convert some currently pervious areas to a combination of impervious surfaces, lawn, and non-native ornamental species. Development outside of wetlands and buffers could result in some indirect impacts on wetlands including sedimentation from stormwater runoff, increased nutrient loading from road and lawn runoff, changes in the amount or time water is in the wetland, and associated changes to wetland vegetation and habitat. Higher density development could also increase the probability of non-native plant species invading wetland and buffer vegetation communities.

With the No Action Alternative, it is likely that any further development on the site would involve an increase in the present petroleum operation's capacity plus additional related industrial uses on the southern area of the site. The effect of an increase in current operations on the site could result in increased impervious surfaces. Additional impervious areas could possibly lead to additional impacts on

the existing wetlands such as increased sedimentation from stormwater runoff, increased nutrient loading from road runoff, or changes in the amount or time water is retained in the wetland.

If wetland or stream impacts are identified for future development, compliance may be required with the U.S. Army Corps of Engineers Section 404 and Section 401 requirements in the Clean Water Act.

4.3.3 Mitigation Measures

Development with any alternative may require mitigation to address specific direct and indirect wetland impacts. If future development is proposed, specific impacts and appropriate mitigation measures would be addressed by the applicable environmental documentation following SEPA regulations. General mitigation measures identified in the Final EIS for the 2005 GMA Comprehensive Plan 10-Year Update (Snohomish County 2005a) include:

- Minimizing impervious surface area;
- Scheduling construction activities to occur during the dry season to reduce impacts on soils near wetlands and streams;
- Encouraging increased infiltration of stormwater where technically feasible;
- Encouraging buffer enhancement; and
- Encouraging enhancement of the buffer where protected stream and wetland buffers are in a degraded condition potentially re-establishing native vegetation and controlling non-native invasive plant species.

Additional details about chapter 30.62A SCC and mitigation measures for specific wetland categories and buffer widths are described in Section 3.3.3 of the Draft SEIS.

4.3.4 Significant Unavoidable Adverse Impacts

If potential impacts on wetlands or buffers from future development with the Alternative Action or 2009 Proposed Action are avoided or mitigated, then no unavoidable adverse impacts are anticipated for this site. If wetland or buffer areas cannot be avoided or mitigated, then any future development would likely result in significant unavoidable adverse wetland impacts.

4.4 Fisheries

4.4.1 Affected Environment

One small stream crosses the Point Wells site in a culvert (except for a small portion at the upstream/eastern edge of the site). The stream does not currently provide any fish habitat value due to the gradient, the size of the stream, and the developed state of the property (ICF Jones & Stokes 2009b).

Along the western edge of the Point Wells site, the Puget Sound tidelands provide marine habitat for a variety of species. The upper intertidal zone includes armored riprap banks along nearly the entire length of the site, with the exception of the northernmost edge. Below the armored bulkhead, there is a gravelly

beach down to about the mean lower low water (MLLW) level. Subtidal habitat west of the site has sandy substrates and supports patchy eelgrass beds down to about the -15 to -20-foot MLLW elevation (King County 2003).

Existing fuel docks on the site provide deepwater ship access to the site and are used to transfer petroleum products from ship to shore. The pilings of the dock structures support a community of marine invertebrates and fish that generally differ from the surrounding areas. The docks shade the bottom and attract rockfish and perch, as well as inhibit eelgrass and macroalgae growth on the bottom. In addition, mollusk and barnacle shell fragments often accumulate beneath pilings, influencing the benthic invertebrate community.

Clams that inhabit the intertidal areas in the vicinity of Point Wells include heart cockles, gapers (horse clams), and geoducks (Golder and Parametrix 2002). Further details on the marine habitat and species are described in Section 3.4.1 of the Draft SEIS.

Eight salmonid fish species (Chinook salmon [*Oncorhynchus tshawytscha]*, coho salmon [*O. kisutch]*, pink salmon [*O. gorbuscha]* chum salmon [*O. keta]*, sockeye salmon [*O. nerka*], steelhead trout [*O. mykiss]*, cutthroat trout [*O. clarki]*, and bull trout [*O. confluentus*]) inhabit Puget Sound and may at times be present along the shoreline of the Point Wells site. Of these species, three (Chinook salmon, steelhead trout, and bull trout) have been federally listed as threatened under the ESA (WDFW 2012). Juvenile salmonids likely forage along the shoreline of Point Wells, and adults may be found farther offshore. Essential fish habitat (EFH) at the Point Wells site, which includes all marine waters below mean high tide elevation, is described in Section 3.4 of the Draft SEIS.

Critical area regulations, as described in chapter 30.62A SCC, regulate development in these critical tideland areas.

4.4.2 Impact Analysis

The Alternative Action would have similar impacts as the 2009 Proposed Action discussed in the Draft and Final SEISs in Section 3.4. The potential impacts would depend on the configuration of future development proposals. The change in the number of housing units and uses with the Alternative Action is not likely to change impacts on fisheries.

The Alternative Action would change the land use of the site and discontinue the existing ship traffic and associated transfer of petroleum products. This action would reduce the risk of oil spills, which can have extensive detrimental effects on fish and aquatic habitat. Other uses consistent with the proposed rezone may involve recreational boating uses, which involve much lower risks of petroleum discharge.

There is currently little or no functioning shoreline buffer along the majority of the shoreline along the Point Wells site. Future development would be required to comply with the County Shoreline Master Plan (adopted by the County Council in June 2012), which requires buffers adjacent to marine waters. Any modification of the existing bulkheads on the shoreline to provide additional beach intertidal area or

shoreline vegetation is likely to enhance aquatic habitat. The standard 150-foot shoreline buffer may be modified on properties designated as an Urban Village. For the buffer to be reduced, the applicant would have to demonstrate that the development would result in a net improvement in buffer functions and values.

Any development proposal at this site that would reduce the shoreline buffer from the standard 150-foot width would have to be evaluated for its effects on buffer functions and values. Restoration opportunities that could be incorporated into buffer enhancement or an innovative development design to improve fisheries habitat conditions could include, but are not limited to:

- Replacing impervious surfaces with pervious surface areas;
- Planting native vegetation that can shade the upper beach or contribute wood to the shoreline; shade of the upper beach could benefit forage fish egg incubation because smelt and sand lance spawn in the substrate of the upper beach and their eggs would be less likely to become desiccated during low tide along shaded beach sections; and
- Replacing a portion of the existing seawall with a more natural shoreline, which could conceivably include pocket beaches or removal of armoring along a more extensive stretch of shoreline; ideally, this option would be combined with native plantings, particularly along the northern side of Point Wells because this area would receive the most shade from trees planted in the buffer area.

With the No Action Alternative, the Point Wells site would continue to increase operations; fuel storage and distribution operations could be added, and marine fueling operations could increase. The shoreline conditions would be expected to remain the same as they are today.

If development of an alternative included any federal funding or permits, compliance with the ESA would be required. This would also involve concurrence from the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) for listed species (Puget Sound Chinook salmon, Puget Sound steelhead trout, and Puget Sound or coastal bull trout).

4.4.3 Mitigation Measures

No mitigation measures for fisheries impacts would be required because any development for either the Alternative Action or 2009 Proposed Action would be designed to restore a more natural shoreline.

4.4.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts on fisheries are anticipated as a result of either the Alternative Action or the 2009 Proposed Action.

4.5 Wildlife and Vegetation

4.5.1 Affected Environment

There is very little vegetation in the upland portion of the Point Wells site and habitat for wildlife is limited. Along the eastern boundary of the site, a steep wooded bluff rises to the east of the railroad tracks.

A bald eagle (*Haliaeetus leucocephalus*) nesting territory is located approximately 0.5 mile to the northeast of the site in Deer Park Reserve. The shoreline buffer associated with this nesting territory extends south and includes approximately the northern quarter of the Point Wells site. Bald eagles from this nesting territory may perch in trees to the east of the site, forage in Puget Sound offshore of the site, and use undeveloped tidelands for consuming prey or resting. Bald eagles are not expected to regularly use the developed portion of the site due to a lack of suitable habitat features (ICF Jones & Stokes 2009b). Bald eagles were removed from the federal Endangered Species list in 2007, but are classified by the Washington Department of Fish and Wildlife (WDFW) as a State Sensitive species.

None of the Washington State sensitive species identified in SCC 30.62A.410 are expected to be present on the site, although gray whales (*Estrichtius robustus*) may occasionally occur offshore of the site. Other marine mammals may also be found in the vicinity, including the southern resident killer whale (*Orcinus orca*), which is listed as endangered under the ESA (70 Federal Register 69903-69912).

Along the western edge of the site are tidelands, as described in Section 4.4 above. A beach assessment study conducted immediately south of the site identified 31 species of invertebrates and several birds. The most abundant species found was butter clam (*Saxidomus gigantean*) and littleneck clam (*Protothaca staminea*). Invertebrates observed included snails, sea stars, barnacles, crabs, shrimp, and anemones. Birds reported included several types of gulls, the western grebe (*Aechmophorus occidentalis*), Arctic tern (*Sterna paradisaea*) and great blue heron (*Ardea herodias*) (King County 2008). In addition, the study also found several species of algae present. Given the proximity of the surveyed area to the site, it is likely that many of the same species also occur at the site.

Other species that may use the site include harbor seals (*Phoca vitulina*), which may forage near the shore or haul out on the beach; birds such as American crow (*Corvus brachyrhynchos*) and European starling (*Sturnus vulgaris*); and additional species of waterfowl.

Additional details about the wildlife and vegetation are described in Sections 3.5.1 and 3.5.2 of the Draft SEIS.

4.5.2 Impact Analysis

The Alternative Action would have similar impacts as the 2009 Proposed Action discussed in the Draft and Final SEISs. The potential impacts would depend on the configuration of future development proposals. The change in the number of housing units and uses with the Alternative Action is not likely to change impacts on wildlife and vegetation.

Access to the Point Wells site is currently restricted, which results in a low level of human activity in the tidal area. This would continue to be the case with the No Action Alternative. Impact with the Alternative Action would be the same as described for the 2009 Proposed Action in Section 3.5 of the Draft and Final SEISs.

With the Alternative Action, if redevelopment occurred with the new Urban Village land use designation, the level of human activity in the tidal area would increase. Point Wells beach to the south is heavily used by clam diggers and beachcombers (King County 2008); similar use could be expected as a result of allowing public access to the site's beaches. This could reduce the potential for some species to use the site because they may be disturbed by the presence of humans. The increased human access could also disturb marine vegetation.

Redevelopment with the Alternative Action could also benefit species that are commonly found in urban areas. Landscaping could provide nesting or foraging habitat for these species. If wetland buffers or shoreline setbacks are restored using native plant species, additional wildlife habitat would be created on the site. If native tree species are planted, in several years they may be suitable for bald eagle use. Redevelopment of the Point Wells site could benefit critical habitat for the species by restoring a shoreline buffer and increasing the amount of vegetation on the site, thereby incrementally improving water quality in the area. However, disturbing soils could allow establishment of non-native invasive plant species, which could affect areas of existing native wetland and marine vegetation.

Wildlife currently using the site have acclimated to the noise and activity associated with industrial use and train traffic. Some species may be disturbed by redevelopment, but others would likely not be disturbed because they are used to the noise of the industrial operations and trains. Following redevelopment, noise levels on the site may be lower because of decreased industrial activity and train traffic to the site and increased vegetative cover that would lessen some noise

With the Alternative Action, the dock on the Point Wells site would no longer be used for transferring fuel, which would eliminate the potential risk of water contamination from a spill affecting marine species and birds.

The potential risk of a spill could rise with the No Action Alternative if industrial operations increase (although safeguards are in place). If industrial operations increase, it is likely to create additional train traffic. These additional activities could potentially increase noise and disturb wildlife using the site. The site would continue to lack significant vegetation and habitat for most wildlife species.

4.5.3 Mitigation Measures

No mitigation measures for wildlife and vegetation would be required because any development for either the Alternative Action or 2009 Proposed Action would include landscaping and be designed to restore a more natural shoreline with native vegetation where appropriate.

4.5.4 Significant Unavoidable Adverse Impacts

With both the Alternative Action and 2009 Proposed Action, public access to the shoreline on the Point Wells site would no longer be restricted. Development of the site would increase human activity in the tidal area, which could disturb wildlife and marine vegetation, and reduce the potential for some species to use the site.

4.6 Air Quality

4.6.1 Affected Environment

Air quality regulations and ambient air quality standards established by EPA, Puget Sound Clean Air Agency (PSCAA), and Ecology are described in Section 3.6 of the Draft SEIS.

The Point Wells site is located in both a carbon monoxide and an ozone maintenance area, which are designated by Ecology (Ecology 2012a, 2012b).

Air pollutant emissions are currently generated by the following industrial operations on or around the Point Wells site:

- Tugboats and barges serving the marine terminal;
- Volatilization (evaporation) losses from fuel loading and fuel storage tanks;
- Boilers and heaters;
- Asphalt-loading equipment;
- Heavy-duty diesel haul trucks shipping fuel and asphalt, which travel along public streets in the area; and
- Freight and commuter rail traffic at an average of 40 trains per day traveling along the perimeter of the Point Wells site on the BNSF rail line, as well as the limited number of freight trains that enter the site to serve existing industrial customers.

4.6.2 Impact Analysis

Impacts with the Alternative Action would be similar but less than the impacts discussed for the 2009 Proposed Action in Section 3.6 of the Draft and Final SEISs. The potential impacts would depend on the configuration of future development proposals. The reduction in the number of housing units and uses with the Alternative Action may reduce impacts on air quality.

With the Alternative Action, the anticipated development would result in increased employment and residential growth on the Point Wells site. This type of urban development would increase traffic on local roadways and cause an increase in vehicle emissions. However, it is unlikely that air quality impacts at local intersections would be significant because EPA's ongoing motor vehicle regulations are decreasing emissions from vehicles. This decrease is likely to offset the increase in traffic. In addition, emissions from the current industrial activities would no longer exist. The Alternative Action would have less development and less potential for increasing traffic and vehicle emissions compared to the 2009 Proposed Action.

Emissions from commercial development or a potential Sounder commuter rail station are unlikely to cause any exceedances of emission standards. PSCAA regulations require all future emission-generating equipment for commercial development to be equipped with best available technology controls to minimize emissions. A potential commuter rail station would not add any additional trains; moreover, EPA's emission control regulations for locomotives mandate future emission reductions.

Similar to the 2009 Proposed Action, the Alternative Action is expected to reduce regional greenhouse gas (GHG) emissions compared to the No Action Alternative. The GHG emission reductions would beneficially contribute to Washington State's goal of reducing statewide GHG emissions to 50 percent below 1990 levels by 2050 (Ecology 2008b). The reduction in GHG emissions from the Point Wells site would be a relatively small fraction of the statewide reduction goal.

During construction, BMPs would be implemented to minimize fugitive dust and odors during construction, as required by PSCAA.

With the No Action Alternative, the air pollutant emissions currently generated by industrial operations (listed above in Section 4.6.1) would continue.

4.6.3 Mitigation Measures

Ecology recently provided adaptation strategies and actions as part of their integrated climate change response strategy (Ecology 2012c). Priority Response Strategy 2 includes consideration of climate change when siting new development to ensure that the design accommodates projected impacts and does not increase risks for neighbors. Additional detailed environmental impacts of development proposals will be evaluated as specific projects are proposed.

During any construction for the Alternative Action, the contractor would be responsible for preparing an air quality control plan prior to site development. This plan would be used to implement BMPs and to control fugitive dust and odors emitted by diesel construction equipment. During construction, dust from excavation and grading could cause temporary, localized increases in the ambient concentrations of fugitive dust and suspended particulate matter. The following BMPs could be used to control fugitive dust:

- Using water sprays or other non-toxic dust control methods on unpaved roadways;
- Minimizing vehicle speed while traveling on unpaved surfaces;
- Preventing track-out of mud onto public streets;
- Covering soil piles when practical; and
- Minimizing work during periods of high winds when practical.

4.6.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts on air quality are anticipated as a result of either the Alternative Action or the 2009 Proposed Action.

4.7 Noise

4.7.1 Affected Environment

Noise sources from industrial operations on the Point Wells site currently include:

- Asphalt-loading equipment;
- Heavy-duty diesel haul trucks shipping fuel and asphalt, traveling along public streets in Woodway and Shoreline;
- Freight and commuter rail traffic on the BNSF main rail line along the east side of the site, along with a limited number of low-speed trains on the rail spur serving the industrial operations at the site;
- Tugs and barges serving the marine terminal; and
- Boilers and heaters.

Noise-sensitive receivers that could be affected by these noise sources include:

- Residential homes on the hillside east of the existing facility, with line-of-sight exposure to noise sources in the properties;
- Residential homes and businesses along the public streets serving the facility; and
- Future homes and businesses in the proposed development.

Common noise levels and noise regulations are described in Section 3.7 of the Draft SEIS.

4.7.2 Impact Analysis

The Alternative Action could potentially increase noise levels in the area as compared to current levels as a result of increased commercial and residential development both during construction and permanently. Impacts with the Alternative Action would also be similar, but less than impacts described in Section 3.7 of the Draft SEIS for the 2009 Proposed Action because the density of development and traffic would be less.

Redevelopment of the Point Wells site would require demolition and construction activities. Nearby homes would temporarily experience increased noise levels. Temporary daytime construction activity is exempted from the County noise ordinance limits; however, daytime construction activity could annoy neighbors. Any construction activity at night would not be exempt from the County's noise ordinance; compliance would be required with the nighttime limits specified by the ordinance. Compliance with the specified limits would ensure nighttime construction activity would not cause significant impacts.

Development for the Alternative Action would create residential and commercial uses on the site. The County would require all prospective future developers to use low-noise mechanical equipment adequate to ensure compliance with the County's current daytime and nighttime noise ordinance limits. Compliance with the noise ordinance would ensure that potential noise impacts from new commercial development and mechanical equipment (such as rooftop air conditioning units) would not be significant.

The development of residential and commercial uses for the Alternative Action would increase traffic volumes on local streets. These traffic increases would cause higher ambient noise levels at residential housing units adjacent to the streets. Traffic noise would be caused by moving traffic, vehicles idling at intersections, and by transit vehicles at bus stops. Noise caused by the new bus trips would be partially offset by displacement of the existing and future industrial haul truck trips that would occur with the No Action Alternative to support operation of the fuel terminal and asphalt plant. The increases in traffic volume as compared to existing levels are likely to increase noise levels on Richmond Beach Drive by 3 to 6 decibels (typically noise levels increase by about 3 decibels for each doubling of traffic volumes). The resulting noise levels are not likely to exceed 60 decibels.

Noise from the existing railroad along the shoreline is largely due to its primary use by freight trains. Future noise levels generated by low-speed operations at a potential commuter rail station would likely be lower than the current noise levels generated by high-speed commuter trains traveling past the site. The operation of commuter trains on the rail line, however, is a miniscule contributor of rail noise compared to freight traffic.

With the No Action Alternative, noise currently generated by industrial operations (listed above in Section 4.7.1) would continue and potentially increase if current operations increase, or if rail traffic along the BNSF rail line increases.

4.7.3 Mitigation Measures

Temporary construction noise generated by potential future construction activities could be bothersome. The County could require future construction contractors in the proposed development to follow measures to reduce construction noise. These measures could include the following:

- Construction at night or on weekends could be prohibited, unless special dispensation was obtained from the County;
- Use of impact equipment could be discouraged before 8:00 a.m. and after 6:00 p.m.;
- Loud, stationary equipment could be located as far away as practical from noise-sensitive receivers;
- Idling trucks could be parked as far away as practical from noise-sensitive receivers and shut off when not active for long periods of time;
- Contractors could be discouraged from dropping pallets onto the ground or from dragging steel items across pavement; and
- Contractors could be required to train employees to be aware of noise concerns at nearby homes and businesses.

There are no permanent noise mitigation measures proposed. The increases in traffic volume are not expected to be high enough to cause a significant increase in traffic noise along the major arterials serving the site.

4.7.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts on noise are anticipated as a result of either the Alternative Action or the 2009 Proposed Action.

4.8 Cultural Resources

4.8.1 Affected Environment

The Point Wells site is in the traditional territory of the Sammamish people—a Duwamish subgroup that occupied the area around the Sammamish River from Puget Sound to the eastern shore of Lake Washington (Curtis 1907; Ruby and Brown 1992; Swanton 1968). No historically known village has been identified near the site.

A record search was undertaken during preparation of the Draft SEIS at the Washington State Department of Archaeology and Historic Preservation (DAHP). The purpose of this search was to identify previously documented archaeological, ethnographic, and historic resources within 1 mile of the Point Wells site and to help establish a context for resource significance. The following inventories and sources were consulted:

- DAHP Electronic Database
- Snohomish County Heritage 2000 Inventory
- National Register of Historic Places
- Washington Information System for Architectural and Archaeological Records Data (WISAARD)

There are no previously recorded archaeological sites found on or within 1 mile of the site. Details about the prehistoric, ethnographic, and historic setting are described in Section 3.8 of the Draft SEIS.

The location of the site on the shores of Puget Sound would have been attractive to hunter-fisher-gatherers in the area that may have intensely used the area for thousands of years. The fill placed on the site for railroad construction and bulk terminal use may have covered cultural resources.

4.8.2 Impact Analysis

The Alternative Action involves changes in the type and density of the development presumed to occur on the Point Wells site, but would not change impacts compared to the 2009 Proposed Action discussed in the Draft and Final SEISs. The likelihood that any new development for the 2009 Proposed Action would affect cultural resources depends on the proximity of the proposed development to any cultural resources identified at the time of development. If any cultural resources were identified during future development, then it is possible that proposed development projects may affect those resources.

4.8.3 Mitigation Measures

It is possible that intact buried archaeological resources remain in untested sections of the Point Wells site. The use of the site since 1912 for industrial purposes may have destroyed any cultural resources

that potentially existed, or it may have protected them. If previously unknown cultural resources were identified during the planning or construction of future development projects, then federal, state, and local laws would apply and would require further review on an individual basis. An archaeological survey and testing would likely be required for projects that involve significant excavation.

4.8.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts on cultural resources are anticipated with either the Alternative Action or the 2009 Proposed Action.

4.9 Aesthetics

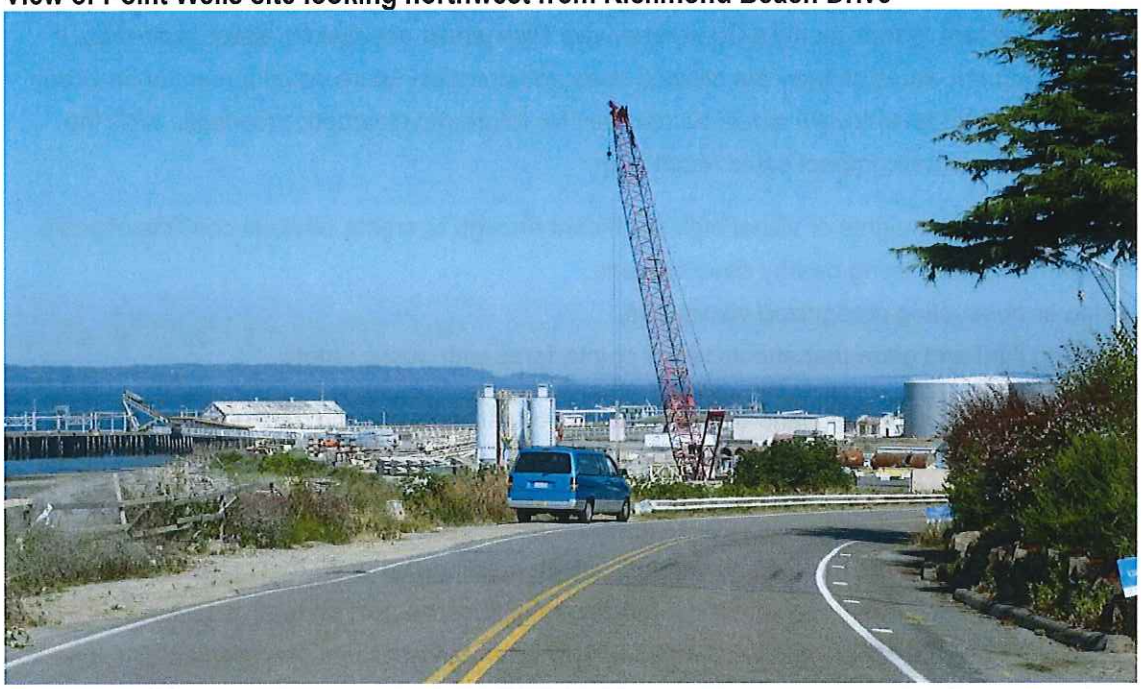
4.9.1 Affected Environment

Most of the Point Wells site is a relatively flat area of shoreline adjacent to Puget Sound. There is a steep grade change to the east of the railroad tracks. The dominant visual features on the site are the petroleum storage tanks that cover the northern and central portions of the lowland area. These tanks vary in age, physical condition, and size. In addition to the petroleum tanks, the northern and central portions of the lowland area contain a large number of prefabricated metal industrial buildings and equipment storage yards. The maximum allowed height for the tanks and industrial buildings on the site is 65 feet. Typical of industrial areas, very little vegetation is present on the site, and groundcover consists primarily of gravel and pavement. The small upland portion of the site on the east side of the railroad tracks is much less intensely developed, containing office buildings and parking areas. The photographs in Figure 4.9-1 show the typical visual character of the area.

Extensive exterior illumination is currently used to provide lighting of the property for operational purposes. The on-site railroad siding, in particular, contains a large number of high-intensity lights for worker safety during loading and unloading procedures. Because of the presence of a thickly wooded grade change immediately east of the Point Wells site, development in that area is currently shielded from the ambient light produced on the site. However, the slope becomes less extreme and less heavily forested near the southern end of the site, and development to the southeast has a direct line of sight to a portion of the existing industrial facility. Views of Puget Sound are a valuable amenity to properties surrounding the Point Wells site. A number of homes have been constructed at the top of the steep slope immediately to the north and east of the site to take advantage of these views (ICF Jones & Stokes 2009b).

Additional information about aesthetics and design guidelines are in Section 3.9 of the Draft SEIS.

Figure 4.9-1.
View of Point Wells site looking northwest from Richmond Beach Drive



View of Point Wells site looking north from Richmond Beach Drive

Photographs taken by David Sherrard

4.9.2 Impact Analysis

The proposed amendment to the County's Comprehensive Plan would not directly affect aesthetics. If adopted, this amendment would change the allowed uses and potential future development of an Urban Village on the site. Project-level review would be required for future development proposals. With the Alternative Action, an aesthetic impact could result from:

- Increasing building heights or visual bulk significant enough to create obvious conflicts of scale between new and existing nearby development;
- Altering or obstructing recognized views; and
- Increasing light and glare that affects views or interferes with public safety.

While impacts could occur, proposed land use and zoning regulations would provide greater pedestrian access to the site, and the proposed mixed-use district would be more aesthetically compatible with the residential nature of surrounding development compared to the current facility.

With the Alternative Action, future development could include buildings up to 75 feet in height without additional review. The director may recommend a building height increase of up to an additional 35 feet under proposed SCC 30.31A.115(2) and SCC 30.23.050(3) when the applicant prepares an environmental impact statement pursuant to chapter 30.61 SCC that includes an analysis of the environmental impacts of the additional height.

Future development on the site is not anticipated to interfere with views from residences at the top of the bluff in Woodway. Project-level design review by the County would be required to determine the exact impacts on views associated with future development for the Alternative Action and to identify if any appropriate mitigation measures are required. The Alternative Action would reduce the potential for impacts to views compared to the 2009 Proposed Action because the intensity of development would be less. The potential impacts would depend on the configuration of future development proposals.

4.9.3 Mitigation Measures

Future development with either of the alternatives may require project-specific mitigation measures to address potential impacts on the built environment, particularly regarding height, bulk, and views. Future impacts would be analyzed and appropriate mitigation measures applied under the County's SEPA review process at the time of application.

4.9.4 Significant Unavoidable Adverse Impacts

The potential exists for future development with the Alternative Action or the 2009 Proposed Action to result in adverse impacts. However, by following the existing regulations, no significant unavoidable adverse impacts on aesthetics are anticipated. A project-level design review would be necessary to identify any specific impacts and appropriate mitigation measures.

4.10 Population, Employment, and Housing

4.10.1 Affected Environment

Population and Housing

There are no existing residents or houses on the Point Wells site. The Point Wells site is bordered by Woodway to the north and east, and Shoreline to the south. According to the 2010 U.S. Census data, the population in Woodway is about 1,307 (Washington State Office of Financial Management 2012) and the population in Shoreline is about 53,007 (U.S. Census Bureau 2012). Snohomish County's population in 2010 was approximately 713,335 (U.S. Census Bureau 2012).

Employment

Paramount estimated that the asphalt operations on the Point Wells site provide approximately 12 jobs (ICF Jones & Stokes 2009b). In addition, truck drivers and workers associated with distribution operations travel to and from the site.

Employment statistics for the County indicated an estimated 255,800 jobs in January 2012 (Washington State Employment Security Department 2012). Woodway is a small residential community with few jobs located in the vicinity of Point Wells. Shoreline contains about 16,000 jobs according to the State of Washington Employment Security Department, as reported in the 2008 King County Annual Growth Report.

Additional information about housing and employment in the area are described in Section 3.10 of the Draft SEIS.

4.10.2 Impact Analysis

The proposed amendment changing the land use and zoning designations would allow development with the Alternative Action to increase the population, employment, and housing capacity compared with the No Action Alternative.

The Alternative Action would add up to 1,800 housing units. The future population would depend on the household size. The current average household size in Snohomish County is 2.65 with an average in King County and adjacent Shoreline of 2.3. The presumed average household size for the 2009 Proposed Action discussed in the Draft and Final SEISs was 2.0, which reflects general trends for multi-family housing of a higher percentage of single-person households and fewer families with children. This household size is used in the 2007 Snohomish County Buildable Lands Report (Snohomish County 2007a). If 2.0 persons per household are presumed with a 92 percent average occupancy rate, the population would be approximately 3,312 people.

Compared to the 2009 Proposed Action's plan to add 3,500 housing units and an estimated 6,442 people, the population and housing capacity is nearly 50 percent less with the Alternative Action. As a result, impacts with the Alternative Action would be less than for the 2009 Proposed Action.

Development of an Urban Village would also include new jobs for office, retail, and facilities staff. The number of new jobs would depend on the mix and density of development. The 2009 Proposed Action estimated adding approximately 800 jobs based on a general rate of 27 employees per acre. Employment estimates for the Alternative Action were based on the trip generation information. This results in an estimate of about 375 employees in the office space with the Alternative Action.

The additional population and job growth would meet or exceed the Woodway MUGA targets. The area is also identified as a potential annexation area for Shoreline and would increase the job and housing capacity for that city. The City of Shoreline Point Wells Subarea Plan does not prescribe the number or type of residential units, or the floor area of various types of commercial uses, but provides the performance standards for parking site design and building form policies that a development must meet.

The No Action Alternative would not provide for additional population or housing units. However, the No Action Alternative would be expected to increase employment by 79 to 104 jobs above the 12 existing jobs. These jobs would support increased asphalt operations and a fuel storage and distribution operation.

4.10.3 Mitigation Measures

The increases in population, employment, and housing do not conflict with growth targets or require mitigation measures on their own. Development allowed with either of the alternatives may require mitigation to address potential impacts, such as traffic generated by the additional population, at a non-project level as well as at the time a site-specific application is considered.

4.10.4 Significant Unavoidable Adverse Impacts

Employment may increase with the No Action Alternative, but would have a greater potential to increase with the Alternative Action or 2009 Proposed Action. The Alternative Action would develop up to 1,800 housing units and increase the population by around 3,312 people. The 2009 Proposed Action would have a higher intensity of development with up to 3,500 housing units and 6,442 people. As a result, the population would grow in this area. Additional development and an increased population on the Point Wells site may result in impacts on the natural and built environment, such as wildlife habitat and public services, which are described above in Sections 4.5 and 4.12.

4.11 Transportation

The following sections present information to identify or address transportation impacts that have changed since publication of the 2009 Draft SEIS and Final SEIS. This includes updates to the affected environment and the No Action Alternative, in addition to new transportation impacts associated with the Alternative Action.

4.11.1 Affected Environment

The affected environment for the Draft and Final SEISs included descriptions of the following transportation facilities that serve the study area and the existing conditions of those facilities:

- Study area roadways and intersections;
- Level of service standards;
- Traffic safety;
- Transit service;
- Pedestrian facilities; and
- Bicycle facilities.

For the most part, existing conditions have not changed since these documents were published. However, level of service analysis results from the Draft and Final SEISs for Existing Conditions are included for comparison with the future alternatives.

Existing Level of Service

Level of service (LOS) is a qualitative measure of congestion that describes the quality of traffic conditions and takes into consideration factors such as volume, speed, travel time, and delay of vehicles traveling on a roadway. All jurisdictions within the study area define urban roadway LOS according to methodologies presented in the Highway Capacity Manual (Transportation Research Board 2000). LOS is represented by letter grades, A through F. LOS A and B reflect traffic flows with minimal delay; LOS C and D reflect moderate and stable traffic conditions; LOS E reflects conditions that approach capacity; and LOS F reflects congested conditions with potential for substantial delays. LOS criteria are established for signalized intersections as well as for stop-controlled intersections. These criteria are described in detail in the Draft SEIS.

LOS standards are used to evaluate the transportation impacts of long-term growth and concurrency. Jurisdictions adopt standards by which the minimum acceptable roadway operating conditions are determined. Deficiencies are identified if operations fall below these standards. LOS standards for roadways within Shoreline, Edmonds, and Woodway, as well as for Washington State Department of Transportation (WSDOT) facilities, are described in detail in the Draft and Final SEISs.

Intersection Operations

Existing (year 2007) AM and PM LOS was evaluated for 23 analysis intersections in the Draft SEIS. Table 4.11-1 shows the LOS analysis results for the AM and PM peak hours from the Draft SEIS.

Table 4.11-1.
Existing (Year 2007) Intersection Level of Service

	Intersection	Existing Traffic Control	Juris-diction	LOS Standard	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
1	244th Street SW and SR 99	Signal	Shoreline/ Edmonds/ WSDOT	E/D (SR 99 HSS)	D (44)	D (48)
2	244th Street SW and Fremont Avenue N	NB Stop-Control	Shoreline	E	C (21)	D (30)
3	Firdale Avenue N and 244th Street SW	NB Stop-Control	Edmonds	D	B (14)	B (12)
4	244th Street SW and 100th Avenue W	EB/WB Stop-Control	Edmonds	D	B (12) / B (13)	B (11) / B (14)
5	SR 104 and 100th Avenue W	Signal	Edmonds/WS DOT	D (SR 104 HSS)	C (24)	C (34)
6	Algonquin Road and Woodway Park Road	EB/WB Stop-Control	Woodway	A	A (10) / A (9)	A (0) / A (9)
7	238th Street SW and Woodway Park Road	All-way Stop-Control	Woodway	A	A (7)	A (7)
8	NW 196th Street and Richmond Beach Drive	WB Stop-Control	Shoreline	E	A (7)	A (9)
9	NW 196th Street and 20th Avenue NW	All-way Stop-Control	Shoreline	E	A (9)	A (9)
10	NW 195th Street and 15th Avenue NW	NB/SB Stop-Control	Shoreline	E	B (12) / B (15)	B (12) / C (18)
11	Richmond Beach Road and 15th Avenue NW	All-way Stop-Control	Shoreline	E	A (10)	B (11)
12	Richmond Beach Road and 8th Avenue NW	Signal	Shoreline	E	C (29)	C (26)
13	Richmond Beach Road and 3rd Avenue NW	Signal	Shoreline	E	A (8)	A (7)
14	Richmond Beach Road and Dayton Avenue N	Signal	Shoreline	E	B (11)	A (9)
15	N 185th Street and Fremont Avenue N	Signal	Shoreline	E	C (24)	C (27)
16	N 185th Street and SR 99	Signal	Shoreline/ WSDOT	E (SR 99 HSS)	D (49)	D (43)
17	N 175th Street and 6th Avenue NW	SB Stop-Control	Shoreline	E	C (15)	B (11)
18	St. Luke Place N and Dayton Avenue N	EB Stop-Control	Shoreline	E	B (15)	B (13)
19	N 175th Street and Fremont Avenue N	Signal	Shoreline	E	A (9)	A (8)
20	N 175th Street and SR 99	Signal	Shoreline/ WSDOT	E (SR 99 HSS)	D (45)	D (36)

	Intersection	Existing Traffic Control	Juris-diction	LOS Standard	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
21	Carlyle Hall Road and Dayton Avenue N	All-way Stop-Control	Shoreline	E	C (22)	C (17)
22	N Innis Arden Way and Greenwood Avenue N	EB Stop-Control	Shoreline	E	B (13)	B (11)
23	N 160th Street and Greenwood Avenue N	All-way Stop-Control	Shoreline	E	C (18)	B (14)

Notes: NB = northbound; SB = southbound; WB = westbound; EB = eastbound
HSS = Highway of Statewide Significance.

As shown in Table 4.11-1, all intersections evaluated in the Draft and Final SEISs operated at acceptable levels at the time of analysis.

Roadway Segment Operations

Existing roadway segment conditions were also evaluated in the Draft SEIS. Roadway segment conditions results are shown in Table 4.11-2.

Table 4.11-2.
Analysis Roadway Segment Characteristics and Existing (Year 2007) Volumes

	Roadway Segment	Width	Jurisdiction	Functional Classification	Estimated Operating Capacity (veh/hour)[1]	Existing Traffic Volume (veh/hour) [2]	
						AM Peak Hour	PM Peak Hour
1	Richmond Beach Drive: Woodway City Limits to NW 196th Street	2 lanes	Shoreline/ Woodway	Collector	1,300	60	70
2	NW 196th Street: Richmond Beach Drive to NW 20th Avenue	2 to 4 lanes	Shoreline	Collector	1,500	130	180
3	NW 195th Street/Richmond Beach Road: 20th Avenues NW to 8th Avenue NW	4 lanes	Shoreline	Minor Arterial	3,400	710	790
4	Richmond Beach Road: 8th Avenue NW to SR 99	4 lanes	Shoreline	Minor Arterial	3,400	1,160	1,230
5	8th Avenue NW/NW 180th Street/6th Avenue NW: Richmond Beach Road to N 175th Avenue	2 lanes	Shoreline	Collector	1,500	490	440
6	Dayton Avenue N: Richmond Beach Road to N 175th Street/Saint Luke Place	2 lanes	Shoreline	Minor Arterial	1,700	690	620
7	Fremont Avenue N: N 175th Street to N 185th Street	2 lanes	Shoreline	Collector	1,500	760	750
8	Fremont Avenue N: N 185th Street to 244th Street SW	2 lanes	Shoreline	Collector	1,500	580	680
9	20th Street NW/Timber Lane/238th	2 lanes	Shoreline/	Collector	1,300	200	230

	Roadway Segment	Width	Jurisdiction	Functional Classification	Estimated Operating Capacity (veh/hour)[1]	Existing Traffic Volume (veh/hour) [2]	
						AM Peak Hour	PM Peak Hour
	Street SW: NW 196th Street to Woodway Park Drive		Woodway				
10	Woodway Park Road: 238th Street SW to Algonquin Road	2 lanes	Woodway	Collector	1,300	110	180
11	244th Street SW: 100th Avenue W to SR 99	2 to 3 lanes	Shoreline/ Edmonds	Collector/ Minor Arterial	1,700	710	690
12	8th Avenue NW: Richmond Beach Road to 244th Street SW	2 lanes	Shoreline	Minor Arterial	1,700	540	550
13	3rd Avenue NW : Richmond Beach Road to 244th Street SW	2 lanes	Shoreline	Collector	1,500	610	430
14	100th Avenue W: 244th Street SW to SR 104	2 to 4 lanes	Edmonds	Minor Arterial	1,700	860	970
15	SR 99: 224th Street SW to N 185th Street (HSS)	5 lanes	Shoreline/ WSDOT	Principal Arterial	4,200	2,230	2,520
16	SR 99: N 175th Street to N 185th Street (HSS)	5 lanes	Shoreline/ WSDOT	Principal Arterial	4,200	2,090	2,670

[1] Operating capacity is a planning-level estimate, based upon the roadway functional classification and width. The two-directional capacity was estimated by applying the per lane planning-level capacities presented in Table 3.11-1 of the 2009 Draft SEIS.

[2] Two-directional traffic volumes, based upon traffic counts taken in November 2007 and March 2008.

As shown in Table 4.11-2, existing traffic volumes on the roadway segments are below the roadways' operating capacities. Because urban roadway operations are generally controlled by intersection operations, and all analysis intersections currently operate within the cities' adopted LOS standards, this indicates that the analysis roadway segments are currently operating at acceptable levels.

4.11.2 Impact Analysis

Transportation impact analysis in the Draft and Final SEISs was completed for the future planning year of 2025. This analysis year was selected for the Draft and Final SEISs to be consistent with the analysis completed for long-range transportation planning efforts for Snohomish County, Woodway, Shoreline, and Edmonds. The Draft and Final SEISs identified and analyzed two alternatives: (1) 2009 Proposed Action, and (2) No Action Alternative. The transportation analysis for the 2009 Proposed Action assumed 3,500 residential housing units would be developed, which captured the highest range of potential vehicles generated by the project. The Alternative Action, reduces the number of residential housing units to 1,800, a 49 percent reduction in units compared to the 2009 Proposed Action.

The transportation impacts for the Alternative Action are described in this section. The transportation impacts identified in the Draft and Final SEISs for the No Action Alternative and 2009 Proposed Action are also summarized for comparison with the Alternative Action.

No Action Alternative

Future traffic volumes at analysis intersections and on analysis roadway segments for the No Action Alternative were previously forecasted in the Draft and Final SEISs using Snohomish County's travel demand model, and reflect conditions expected to result for the adopted Future Land Use Map.

Intersection Operations

Table 4.11-3 summarizes projected LOS conditions for the No Action Alternative. Year 2025 traffic analysis results from the 2009 Final SEIS are shown. These results serve as a baseline for assessing future project impacts.

Table 4.11-3.
Year 2025 Intersection Level of Service – No Action Alternative

	Intersection	Existing Traffic Control	Juris-diction	LOS Standard	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
1	244th Street SW and SR 99	Signal	Shoreline/ Edmonds/ WSDOT	E/D (SR 99 HSS)	F (173)	F (115)
2	244th Street SW and Fremont Avenue N	NB Stop-Control	Shoreline	E	E (46)	F (71)
3	Firdale Avenue N and 244th Street SW	NB Stop-Control	Edmonds	D	C (18)	B (14)
4	244th Street SW and 100th Avenue W	EB/WB Stop-Control	Edmonds	D	C (18) / C (24)	A (9) / F (53)
5	SR 104 and 100th Avenue W	Signal	Edmonds/ WSDOT	D (SR 104 HSS)	E (68)	F (133)
6	Algonquin Road and Woodway Park Road	EB/WB Stop-Control	Woodway	A	B (12) / B (11)	A (0) / B (15)
7	238th Street SW and Woodway Park Road	All-way Stop-Control	Woodway	A	A (8)	A (9)
8	NW 196th Street and Richmond Beach Drive	WB Stop-Control	Shoreline	E	A (9)	A (9)
9	NW 196th Street and 20th Avenue NW	All-way Stop-Control	Shoreline	E	B (10)	B (11)
10	NW 195th Street and 15th Avenue NW	NB/SB Stop-Control	Shoreline	E	B (14) / C (19)	A (10) / D (26)
11	Richmond Beach Road and 15th Avenue NW	All-way Stop-Control	Shoreline	E	B (10)	B (12)
12	Richmond Beach Road and 8th Avenue NW	Signal	Shoreline	E	E (65)	E (62)

	Intersection	Existing Traffic Control	Juris-diction	LOS Standard	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
13	Richmond Beach Road and 3rd Avenue NW	Signal	Shoreline	E	C (27)	A (10)
14	Richmond Beach Road and Dayton Avenue N	Signal	Shoreline	E	B (15)	B (12)
15	N 185th Street and Fremont Avenue N	Signal	Shoreline	E	C (33)	D (36)
16	N 185th Street and SR 99	Signal	Shoreline/ WSDOT	E (SR 99 HSS)	F (90)	F (107)
17	N 175th Street and 6th Avenue NW	SB Stop-Control	Shoreline	E	F (57)	C (17)
18	St. Luke Place N and Dayton Avenue N	EB Stop-Control	Shoreline	E	C (24)	B (14)
19	N 175th Street and Fremont Avenue N	Signal	Shoreline	E	B (12) / B (11)	A (8)
20	N 175th Street and SR 99	Signal	Shoreline/ WSDOT	E (SR 99 HSS)	D (49)	E (56)
21	Carlyle Hall Road and Dayton Avenue N	All-way Stop-Control	Shoreline	E	F (104)	E (46)
22	N Innis Arden Way and Greenwood Avenue N	EB Stop-Control	Shoreline	E	C (20)	B (13)
23	N 160th Street and Greenwood Avenue N	All-way Stop-Control	Shoreline	E	F (58)	D (26)

Notes: NB = northbound; SB = southbound; WB = westbound; EB = eastbound
HSS = Highway of Statewide Significance.

As shown in Table 4.11-3, the following nine of the 23 intersections evaluated in the Final SEIS were projected to operate below acceptable LOS standards during the PM peak hour in the year 2025:

- (1) 244th Street SW and SR 99 (AM and PM peak hours),
- (2) 244th Street SW and Fremont Avenue N (PM peak hour),
- (4) 244th Street SW and 100th Avenue W (PM peak hour),
- (5) SR 104 and 100th Avenue W (AM and PM peak hours),
- (6) Algonquin Road and Woodway Park Road (AM and PM peak hours),
- (16) N 185th Street and SR 99 (AM and PM peak hours)
- (17) N 175th Street and 6th Avenue NW (AM peak hour),
- (21) Carlyle Hall Road and Dayton Avenue N (AM peak hour), and
- (23) N 160th Street and Greenwood Avenue N (AM peak hour).

Of these nine intersections, five are located in Shoreline, two are located in Edmonds, one is located on the Shoreline/ Edmonds city boundary, and one is located in Woodway. The intersection located in Woodway is projected to operate at LOS B, which reflects a relatively low level of delay; however, it exceeds Woodway's adopted standard of LOS A, and thus is considered an impact.

The 2025 LOS results for the No Action Alternative, as evaluated in the Final SEIS, reflect a conservative estimate of future roadway conditions, based on a build-out of regional land use projected by the County and PSRC. The programmatic Draft and Final SEISs sought to assess the "worst case" cumulative conditions for the purpose of determining an order-of-magnitude effect of the proposed change in land use designation and zoning on the transportation system. Thus, the analysis assumed that historical mode split trends would continue into the future, resulting in a higher proportion of vehicle traffic.

However, planned transit enhancements on SR 99 and other demand-oriented strategies planned by the cities within the study area are likely to result in a future No Action Alternative vehicle demand that is lower than the levels reflected in the Draft and Final SEISs. It is appropriate to reflect commitments to enhanced transportation demand management measures in future project-level analysis which, unlike programmatic analysis, can include mechanisms by which such commitments can be ensured.

Roadway Segment Operations

Table 4.11-4 summarizes projected operating conditions of the roadway segments analyzed for the No Action Alternative. The table shows that traffic volumes on some roadways are projected to increase substantially for the No Action Alternative. In particular, roadways in the northeast section of Shoreline (including, and northeast of, 8th Avenue NW and Richmond Beach Road/N 185th Street) are expected to experience substantial increases in traffic; though they are still projected to be below their estimated operating capacities.

Table 4.11-4.
Year 2025 Roadway Segment Operations-No Action Alternative

	Roadway Segment	Estimated Operating Capacity (veh/hour)[1]	Existing Traffic Volumes (veh/hour)		2025 No Action Volumes (veh/hour)		Includes Intersection(s) that Exceed LOS Standard	Jurisdiction
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		
1	Richmond Beach Drive: Woodway City Limits to NW 196th Street	1,300	60	70	110	115	No	Shoreline/ Woodway
2	NW 196th Street: Richmond Beach Drive to NW 20th Avenue	1,500	130	180	295	400	No	Shoreline
3	NW 195th Street/Richmond Beach Road: 20th Avenues NW to 8th Avenue NW	3,400	710	790	785	1,060	No	Shoreline
4	Richmond Beach Road: 8th Avenue NW to SR 99	3,400	1,160	1,230	1,360	1,980	Yes	Shoreline
5	8th Avenue NW/NW 180th Street/6th Avenue NW: Richmond Beach Road to N 175th Avenue	1,500	490	440	820	940	Yes	Shoreline
6	Dayton Avenue N: Richmond Beach Road to N 175th Street/Saint Luke Place	1,700	690	620	855	730	No	Shoreline
7	Fremont Avenue N: N 175th Street to N 185th Street	1,500	760	750	880	885	No	Shoreline

	Roadway Segment	Estimated Operating Capacity (veh/hour)[1]	Existing Traffic Volumes (veh/hour)		2025 No Action Volumes (veh/hour)		Includes Intersection(s) that Exceed LOS Standard	Jurisdiction
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour		
8	Fremont Avenue N: N 185th Street to 244th Street SW	1,500	580	680	830	1,075	Yes	Shoreline
9	20th Street NW/Timber Lane/238th Street SW: NW 196th Street to Woodway Park Road	1,300	200	230	370	460	No	Shoreline/ Woodway
10	Woodway Park Road: 238th Street SW to Algonquin Road	1,300	110	180	330	400	Yes	Woodway
11	244th Street SW: 100th Avenue W to SR 99	1,700	710	690	1,415	1,335	Yes	Shoreline/ Edmonds
12	8th Avenue NW: Richmond Beach Road to 244th Street SW	1,700	540	550	1,025	1,120	Yes	Shoreline
13	3rd Avenue NW : Richmond Beach Road to 244th Street SW	1,500	610	430	1,040	695	No	Shoreline
14	100th Avenue W: 244th Street SW to SR 104	1,700	860	970	820	960	Yes	Edmonds
15	SR 99: 224th Street SW to N 185th Street	4,200	2,230	2,520	4,175	3,730	Yes	Shoreline/ WSDOT
16	SR 99: N 175th Street to N 185th Street	4,200	2,090	2,670	3,285	3,720	Yes	Shoreline/ WSDOT

[1] Operating capacity is a planning-level estimate, based upon the roadway functional classification and width. The two-directional capacity was estimated by applying the per-lane planning-level capacities presented in Table 3.11-1 in the Draft SEIS.

Even though no roadways are projected to have volumes that exceed their estimated operational capacities, the following nine road segments include intersections projected to exceed applicable LOS standards, which, in turn would affect overall operations along the roadway:

- (4) Richmond Beach Road: 8th Avenue NW to SR 99,
- (5) 8th Avenue NW/NW 180th Street/6th Avenue NW: Richmond Beach Road to N 175th Avenue,
- (8) Fremont Avenue N: N 185th Street to 244th Street SW,
- (10) Woodway Park Road: 238th Street SW to Algonquin Road,
- (11) 244th Street SW: 100th Avenue W to SR 99,
- (12) 8th Avenue NW: Richmond Beach Road to 244th Street SW,
- (14) 100th Avenue W: 244th Street SW to SR 104,
- (15) SR 99: 224th Street SW to N 185th Street, and
- (16) SR 99: N 175th Street to N 185th Street.

As noted above for the No Action Alternative intersection analysis, the 2025 LOS results for the No Action Alternative reflect a conservative estimate of future roadway conditions, based on a build-out of regional land use projected by the County and PSRC. The programmatic Draft and Final SEISs sought to assess

the "worst case" cumulative conditions for the purpose of determining an order-of-magnitude effect of the proposed change in land use designation and zoning on the transportation system. Thus, the analysis assumed that historical mode split trends would continue into the future, resulting in a higher proportion of vehicle traffic.

However, planned transit enhancements on SR 99 and other demand-oriented strategies planned by the cities within the study area are likely to result in a future No Action vehicle demand that is lower than the levels reflected in the Draft and Final SEIS analysis. It is appropriate to reflect commitments to enhanced demand-oriented measures in future project-level analysis which, unlike programmatic analysis, can include mechanisms by which such commitments can be ensured.

2009 Proposed Action

Future traffic volumes at analysis intersections and on analysis roadway segments for the 2009 Proposed Action were forecasted using the County's travel demand model, and reflect conditions expected to result from the maximum allowable build-out of the site for the proposed land use designation and zoning. The 2009 Proposed Action is described in detail in Chapter 3 of this addendum.

It is important to note that the 2009 Proposed Action analyzed in the Draft and Final SEISs reflected only the proposed change in land use designation and zoning; it did not reflect the actual development that would be built on the site if the zoning change were approved. If the 2009 Proposed Action (proposed land use designation and zoning change) were to be approved, project-level environmental analysis would still be required for the actual development proposed on the site. Because only a programmatic analysis was conducted in the Draft and Final SEISs to evaluate impacts that could potentially occur as a result of the proposed land use designation and zoning change, the transportation analysis conservatively focused on the highest level of development, and thus the highest level of transportation impact, that could reasonably be expected to occur for that proposed designation. Thus, it is possible that future development and transportation impacts for the 2009 Proposed Action could be less intense than what was evaluated in the Draft and Final SEISs.

Traffic Forecasts

The Draft and Final SEIS travel demand forecasting model (mentioned for the No Action Alternative) was also developed to project future year traffic volumes within the study area for the 2009 Proposed Action. The technical report that documents the model development was provided in Appendix E of the Draft SEIS. Outside the Point Wells site, all land use for the 2009 Proposed Action was the same as the land use identified for the No Action Alternative. Inside the Point Wells site, land use and resulting trip generation projections reflected build-out of development that would be allowed for the proposed land use designation and zoning change.

Land Use and Trip Generation

Traffic volumes for potential development for the proposed land use designation and zoning were estimated using standard average trip generation rates from the Trip Generation Manual (Institute of

Transportation Engineers 2003). Table 4.11-5 summarizes the trip generation rates that were used to analyze land use types that would be expected for the proposed land use designation and zoning.

Table 4.11-6 summarizes the mix of land use that was assumed for build-out of the proposed land use designation and zoning, and the projection of trips generated by those land uses. Trips were projected by applying the rates summarized in Table 4.11-5 to the land uses summarized in Table 4.11-6. Commercial development generally tends to result in higher trip generation than residential development for the same geographical area. The proposed mixed use for the 2009 Proposed Action could reflect varying proportions of commercial to residential development. For the Draft and Final SEIS analysis, a proportion of commercial development at the higher end of the potential trip generation range was conservatively assumed.

As shown in Table 4.11-6, the year 2009 Proposed Action is projected to generate 1,054 trips during the AM peak hour and 1,284 trips during the PM peak hour. The 2009 Proposed Action is projected to generate 12,614 daily trips.

Table 4.11-5.
Institute of Traffic Engineers Trip Generation Rates—2009 Proposed Action

			AM Peak			PM Peak			
ITE Land Use Category	ITE Code	Unit	ITE Average Rate	% In	% Out	ITE Average Rate	% In	% Out	Zoning Use
Residential Condominium/Townhouse	230	Dwelling Units	0.19[a]	16%	84%	0.24[b]	67%	33%	Multiple Residential
General Office Building	710	Employees	0.48[c]	88%	12%	0.46[d]	17%	83%	Service
Specialty Retail Center	814	1,000 Square Feet	-	-	-	2.71[e]	44%	56%	Retail
Shopping Center	820	1,000 Square Feet	1.03	61%	39%	-	-	-	Retail

[a] Projected trips are calculated based on the equation, Ln(T) = 0.80Ln(X) + 0.26, T = trips and X = land use.
[b] Projected trips are calculated based on the equation, Ln(T) = 0.82Ln(X) + 0.32, T = trips and X = land use.
[c] Projected trips are calculated based on the equation, Ln(T) = 0.86Ln(X) + 0.24, T = trips and X = land use.
[d] Projected trips are calculated based on the equation, T = 0.37(X) +60.08, T = trips and X = land use.
[e] Projected trips are calculated based on the equation, T = 2.40(X) + 21.48, T = trips and X = land use.
ITE = Institute of Traffic Engineers
Source: Institute of Transportation Engineers 2003

Table 4.11-6.
Trip Generation Projections—2009 Proposed Action

ITE Land Use Category	ITE Code	Unit[a]	Unit Type	AM Trips[b]		PM Trips[c]	
				Inbound	Outbound	Inbound	Outbound
Residential Condominium/Townhouse	230	3,220	Dwelling Units	121	613	602	295
General Office Building	710	528	Employees	220	28	32	176
Specialty Retail Center/ Shopping Center	814/ 820	136	1,000 Square feet	49	23	75	104
Total Trips				**390**	**664**	**709**	**575**

[a] Retail employees converted at 500 gross square feet per employee.
[b] AM reductions from total trips for internal trips (2.9%), walk/bike (10%), and pass-by (34% of retail).
[c] PM reductions for internal trips (5.9%), walk/bike (10%), and pass-by (34% of retail).

Trip Generation Adjustments

Traffic generated by the 2009 Proposed Action could potentially travel via automobile, transit, or non-motorized modes. As described previously, trips generated by land use for the 2009 Proposed Action were projected according to standard methods and rates presented in the Trip Generation Manual (Institute of Transportation Engineers 2003). The Institute of Transportation Engineers (ITE) presents rates for vehicle trips, based upon driveway counts of representative sites for different land uses. At the ITE-observed sites, a typical level of transit and non-motorized travel would be presented that is in addition to the vehicle estimates. However, for development that departs from typical observed sites, ITE provides guidelines for making adjustments to these assumptions.

Typical ITE sites do not reflect mixed use development. Because development for the 2009 Proposed Action zoning would be mixed use, adjustments were made in the total trips generated by the site to reflect a higher level of trips that would occur among different uses within the site. Multi-family and commercial development would be located close to each other; therefore, a greater number of non-motorized trips would be expected to occur between them. The ITE Trip Generation Handbook (Institute of Transportation Engineers 2001) provides guidelines for these adjustments, based on the mix of land use. Using these guidelines, a 10 percent reduction was applied to the total trip estimate. These reduced trips are assumed to travel within the site, and thus were not assigned to the surrounding street network.

It is expected that at full build-out, the site would have sufficient density to support transit routes to and from the site. However, because the site is geographically isolated, the analysis assumed that transit use would reflect typical levels that are already implicit in the ITE trip generation rates, so no additional reductions were made regarding regional transit access to and from the site.

Trip Distribution

2009 Proposed Action – 60/40 Split

The distribution of site-generated trips is projected as part of the travel demand modeling process. Figures 3.11-5 and 3.11-6 in the Draft SEIS showed the general directional distribution of trips for the 2009 Proposed Action during AM and PM peak hours, respectively. These figures indicated that approximately 60 percent of site-generated trips would have destinations to and from the north in Snohomish County, and approximately 40 percent of site-generated trips would have destinations to and from the south in King County.

Alternate Trip Distribution Scenario – 50/50 Split

The model developed for the Draft SEIS analysis indicated a tendency for project-generated traffic traveling to/from the north to choose routes through Shoreline and Edmonds parallel to SR 99, to avoid higher traffic volumes on that roadway. In their review of the Draft SEIS, both the City of Shoreline and WSDOT indicated that this approach resulted in an underestimation of potential project impact on Richmond Beach Road/196th/195th/185th and SR 99.

To address concerns regarding site-generated trip distribution, a supplemental sensitivity analysis was completed for the Final SEIS, in which site-generated trip distribution was assumed to be split approximately 50 percent to/from the north, and 50 percent to/from the south. This was combined with an adjustment to the model output that maintained a higher volume of site-generated traffic on Richmond Beach Road/196th/195th/185th, between Richmond Beach Drive and SR 99. The result of combining these assumptions was an analysis scenario that reflected more intense impact on Richmond Beach Road/196th/195th/185th and SR 99, and a lower level of impact on alternate routes through north Shoreline and Edmonds.

Intersection Operations

2009 Proposed Action – 60/40 Split

Table 4.11-7 summarizes projected 2025 intersection LOS for the 2009 Proposed Action with the 60/40 trip distribution. The table shows that operations at the nine intersections projected to exceed LOS standards for the No Action Alternative are expected to degrade further for the 2009 Proposed Action with the original 60/40 trip distribution. In addition, the following four intersections projected to meet standards for the No Action Alternative are expected to exceed standards for the 2009 Proposed Action:

- (9) NW 196th Street and 20th Avenue NW,
- (10) NW 195th Street and 15th Avenue NW,
- (11) Richmond Beach Road and 15th Avenue NW, and
- (12) Richmond Beach Road and 8th Avenue NW.

All four intersections are located along NW 196th Street/NW 195th Street/Richmond Beach Road in Shoreline, which is the primary route between the Point Wells site and SR 99.

Table 4.11-7.
Year 2025 Intersection Level of Service – 2009 Proposed Action (With 60/40 Trip Distribution Split)

	Intersection	Existing Traffic Control	Juris-diction	LOS Standard	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
1	244th Street SW and SR 99	Signal	Shoreline/ Edmonds/ WSDOT	E/D (SR 99 HSS)	F (195)	F (121)
2	244th Street SW and Fremont Avenue N	NB Stop-Control	Shoreline	E	F (90)	F (107)
3	Firdale Avenue N and 244th Street SW	NB Stop-Control	Edmonds	D	D (28)	C (15)
4	244th Street SW and 100th Avenue W	EB/WB Stop-Control	Edmonds	D	C (22) / E (43)	A (11) / F (>300)
5	SR 104 and 100th Avenue W	Signal	Edmonds/ WSDOT	D (SR 104 HSS)	F (95)	F (166)
6	Algonquin Road and Woodway Park Road	EB/WB Stop-Control	Woodway	A	B (14) / B (13)	A (0) / C (18)

	Intersection	Existing Traffic Control	Juris-diction	LOS Standard	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
7	238th Street SW and Woodway Park Road	All-way Stop-Control	Woodway	A	A (10)	A (10)
8	NW 196th Street and Richmond Beach Drive	WB Stop-Control	Shoreline	E	B (15)	C (23)
9	NW 196th Street and 20th Avenue NW	All-way Stop-Control	Shoreline	E	E (44)	F (68)
10	NW 195th Street and 15th Avenue NW	NB/SB Stop-Control	Shoreline	E	E (29) / F (105)	B (11) / F (278)
11	Richmond Beach Road and 15th Avenue NW	All-way Stop-Control	Shoreline	E	D (33)	F (83)
12	Richmond Beach Road and 8th Avenue NW	Signal	Shoreline	E	F (111)	F (167)
13	Richmond Beach Road and 3rd Avenue NW	Signal	Shoreline	E	C (26)	B (10)
14	Richmond Beach Road and Dayton Avenue N	Signal	Shoreline	E	B (16)	B (12)
15	N 185th Street and Fremont Avenue N	Signal	Shoreline	E	D (36)	D (36)
16	N 185th Street and SR 99	Signal	Shoreline/ WSDOT	E (SR 99 HSS)	F (96)	F (106)
17	N 175th Street and 6th Avenue NW	SB Stop-Control	Shoreline	E	F (70)	C (18)
18	St. Luke Place N and Dayton Avenue N	EB Stop-Control	Shoreline	E	D (27)	C (15)
19	N 175th Street and Fremont Avenue N	Signal	Shoreline	E	B (11)	A (8)
20	N 175th Street and SR 99	Signal	Shoreline/ WSDOT	E (SR 99 HSS)	D (53)	E (64)
21	Carlyle Hall Road and Dayton Avenue N	All-way Stop-Control	Shoreline	E	F (113)	F (55)
22	N Innis Arden Way and Greenwood Avenue N	EB Stop-Control	Shoreline	E	C (21)	B (13)
23	N 160th Street and Greenwood Avenue N	All-way Stop-Control	Shoreline	E	F (65)	D (29)

Notes: NB = northbound; SB = southbound; WB = westbound; EB = eastbound
HSS = Highway of Statewide Significance.

Alternate Trip Distribution Scenario – 50/50 Split

Table 4.11-8 summarizes the 2025 PM peak hour intersection LOS for the 2009 Proposed Alternative with the alternate trip distribution scenario (50/50 split). As shown in Table 4.11-8, the alternate trip distribution scenario results in increased delay at intersections on Richmond Beach Road, N 185th Street, and SR 99. However, no additional intersections are identified to exceed the LOS standards for this scenario. Delay is projected to decrease at locations along N 205th Street/244th Street SW, and also at the intersections of 8th Avenue NW and 15th Avenue W with Richmond Beach Road (due to a greater number of vehicles traveling straight through the intersections, and fewer vehicles making left turns).

Table 4.11-8.
Year 2025 PM Peak Hour Intersection Level of Service —2009 Proposed Action with Alternate Trip Distribution Scenario (50/50 Split)

	Intersection	Existing Traffic Control	Jurisdiction	LOS Standard	2009 Proposed Action – 60/40 Split LOS (Delay)	Alternate Trip Distribution Scenario – 50/50 Split LOS (Delay)
1	244th Street SW and SR 99	Signal	Shoreline/ Edmonds/ WSDOT	E/D (SR 99 HSS)	F (121)	F (129)
2	244th Street SW and Fremont Avenue N	NB Stop-Control	Shoreline	E	F (107)	F (89)
3	Firdale Avenue N and 244th Street SW	NB Stop-Control	Edmonds	D	C (15)	C (15)
4	244th Street SW and 100th Avenue W	EB/WB Stop-Control	Edmonds	D	A (11) / F (>300)	A (9) / F (123)
5	SR 104 and 100th Avenue W	Signal	Edmonds/WSDOT	D (SR 104 HSS)	F (166)	F (146)
6	Algonquin Road and Woodway Park Road	EB/WB Stop-Control	Woodway	A	A (0) / C (18)	A (9) / C (17)
7	238th Street SW and Woodway Park Road	All-way Stop-Control	Woodway	A	A (10)	A (10)
8	NW 196th Street and Richmond Beach Drive	WB Stop-Control	Shoreline	E	C (23)	D (28)
9	NW 196th Street and 20th Avenue NW	All-way Stop-Control	Shoreline	E	F (68)	F (90)
10	NW 195th Street and 15th Avenue NW	NB/SB Stop-Control	Shoreline	E	B (11) / F (278)	B (11) / F (>300)
11	Richmond Beach Road and 15th Avenue NW	All-way Stop-Control	Shoreline	E	F (83)	F (69)
12	Richmond Beach Road and 8th Avenue NW	Signal	Shoreline	E	F (167)	F (105)
13	Richmond Beach Road and 3rd Avenue NW	Signal	Shoreline	E	B (10)	B (15)
14	Richmond Beach Road and Dayton Avenue N	Signal	Shoreline	E	B (12)	B (13)
15	N 185th Street and Fremont Avenue N	Signal	Shoreline	E	D (36)	D (48)
16	N 185th Street and SR 99	Signal	Shoreline/WSDOT	E (SR 99 HSS)	F (106)	F (162)
17	N 175th Street and 6th Avenue NW	SB Stop-Control	Shoreline	E	C (18)	C (20)
18	St. Luke Place N and Dayton Avenue N	EB Stop-Control	Shoreline	E	C (15)	B (15)

	Intersection	Existing Traffic Control	Jurisdiction	LOS Standard	2009 Proposed Action – 60/40 Split LOS (Delay)	Alternate Trip Distribution Scenario – 50/50 Split LOS (Delay)
19	N 175th Street and Fremont Avenue N	Signal	Shoreline	E	A (8)	A (8)
20	N 175th Street and SR 99	Signal	Shoreline/WSDOT	E (SR 99 HSS)	E (64)	E (69)
21	Carlyle Hall Road and Dayton Avenue N	All-way Stop-Control	Shoreline	E	F (55)	F (53)
22	N Innis Arden Way and Greenwood Avenue N	EB Stop-Control	Shoreline	E	B (13)	B (13)
23	N 160th Street and Greenwood Avenue N	All-way Stop-Control	Shoreline	E	D (29)	D (28)

Notes: NB = northbound; SB = southbound; WB = westbound; EB = eastbound
HSS = Highway of Statewide Significance.

Roadway Segment Operations

2009 Proposed Action – 60/40 Split

Table 4.11-9 summarizes projected operating conditions of the roadway segments analyzed for the 2009 Proposed Action with a 60/40 north-south trip distribution split. The table summarizes the projected percentage of volume difference for the 2009 Proposed Action, compared to the No Action Alternative. In most cases, the Proposed Action is expected to result in traffic increases; but in some cases, minor decreases are projected. This is because the model analyzes network-wide effects of traffic patterns; and in some cases, the overall effect of the new site-generated traffic could be a shift in the paths taken by other traffic unrelated to the site.

Table 4.11-9.
Segment Volume Increase by the 2009 Proposed Action

			AM Peak Hour			PM Peak Hour		
	Roadway Segment	Estimated Operating Capacity[1]	No Action (veh/hr)	2009 Proposed Action (veh/hr)	% Increase	No Action (veh/hr)	2009 Proposed Action (veh/hr)	% Increase
1	Richmond Beach Drive: Woodway City Limits to NW 196th Street	1,300	110	1,085	886%	115	1,310	1039%
2	NW 196th Street: Richmond Beach Drive to NW 20th Avenue	1,500	295	1,270	331%	400	1,590	298%
3	NW 195thStreet/Richmond Beach Road: 20th Avenues NW to 8th Avenue NW	3,400	785	1,640	109%	1,060	1,960	85%
4	Richmond Beach Road: 8th Avenue NW to SR 99	3,400	1,360	1,975	45%	1,980	2,150	9%

	Roadway Segment	Estimated Operating Capacity[1]	AM Peak Hour			PM Peak Hour		
			No Action (veh/hr)	2009 Proposed Action (veh/hr)	% Increase	No Action (veh/hr)	2009 Proposed Action (veh/hr)	% Increase
5	8th Avenue NW/NW 180th Street/6th Avenue NW: Richmond Beach Road to N 175th Avenue	1,500	820	855	4%	940	935	-1%
6	Dayton Avenue N: Richmond Beach Road to N 175th Street/Saint Luke Place	1,700	855	865	1%	730	800	10%
7	Fremont Avenue N: N 175th Street to N 185th Street	1,500	880	895	2%	885	955	8%
8	Fremont Avenue N: N 185th Street to 244th Street SW	1,500	830	795	-4%	1,075	1,085	1%
9	20th Street NW/Timber Lane/238th Street SW: NW 196th Street to Woodway Park Road	1,300	370	550	49%	460	590	28%
10	Woodway Park Road: 238th Street SW to Algonquin Road	1,300	330	555	68%	400	550	38%
11	244th Street SW: 100th Avenue W to SR 99	1,700	1,415	1,550	10%	1,335	1,425	7%
12	8th Avenue NW: Richmond Beach Road to 244th Street SW	1,700	1,025	1,235	20%	1,120	1,645	47%
13	3rd Avenue NW : Richmond Beach Road to 244th Street SW	1,500	1,040	1,060	2%	695	705	1%
14	100th Avenue W: 244th Street SW to SR 104	1,700	820	920	12%	960	1,400	46%
15	SR 99: 224th Street SW to N 185th Street	4,200	4,175	4,200	1%	3,730	3,700	-1%
16	SR 99: N 175th Street to N 185th Street	4,200	3,285	3,285	0%	3,720	3,700	-1%

[1] Operating capacity is a planning level estimate, based on the roadway functional classification and width. This value was estimated by applying the per lane planning-level capacities presented in Table 3.11-1 in the Draft SEIS.

Projections indicate that the 2009 Proposed Action would increase traffic volumes on the following roadway segments by greater than 50 percent as compared to the peak hour volumes for the No Action Alternative:

- (1) Richmond Beach Drive: Woodway City Limits to NW 196th Street (AM and PM peak hours)
- (2) NW 196th Street: Richmond Beach Drive to NW 20th Avenue (AM and PM peak hours)
- (3) NW 195th Street/Richmond Beach Road: 20th Avenue NW to 8th Avenue NW (AM and PM peak hours)
- (10) Woodway Park Road: 238th Street SW to Algonquin Road (AM peak hour)

Woodway Park Road (segment 10) is located in Woodway. The higher relative increase on this segment is due in part to its proximity to the site, but also because the No Action Alternative volumes on this

roadway segment are relatively low. The other analysis segments are those closest to the site, so it would be expected that the relative increases in volumes would be higher at these locations. Site-generated traffic is expected to disperse, and result in smaller increases over the No Action Alternative, as it gets farther from the site.

Table 4.11-9 shows that site-generated PM peak hour volumes are projected to exceed operational capacity on segment (1) Richmond Beach Drive, and segment (2) the two-lane portion of NW 196th Street (west of NW 24th Avenue) for 2009 Proposed Action conditions.

Table 4.11-10 identifies which of the analysis road segments include one or more intersections that are projected to exceed adopted LOS standards for the 2009 Proposed Action. In addition to the nine road segments identified for the No Action Alternative that include intersections projected to exceed standards, the following three segments include intersections that exceed standards for the 2009 Proposed Action:

- (2) NW 196th Street: Richmond Beach Drive to NW 20th Avenue,
- (3) NW 195th Street/Richmond Beach Road: 20th Avenue NW to 8th Avenue NW, and
- (9) 20th Street NW/Timber Lane/238th Street SW: NW 196th Street to Woodway Park Road.

Table 4.11-10.
2009 Proposed Action Roadway Segment Operations

	Roadway Segment	Includes Intersection(s) that Exceed LOS Standard	Jurisdiction
1	Richmond Beach Drive: Woodway City Limits to NW 196th Street	No	Shoreline/ Woodway
2	NW 196th Street: Richmond Beach Drive to NW 20th Avenue	Yes	Shoreline
3	NW 195th Street/Richmond Beach Road: 20th Avenue NW to 8th Avenue NW	Yes	Shoreline
4	Richmond Beach Road: 8th Avenue NW to SR 99	Yes	Shoreline
5	8th Avenue NW/NW 180th Street/6th Avenue NW: Richmond Beach Road to N 175th Avenue	Yes	Shoreline
6	Dayton Avenue N: Richmond Beach Road to N 175th Street/Saint Luke Place	No	Shoreline
7	Fremont Avenue N: N 175th Street to N 185th Street	No	Shoreline
8	Fremont Avenue N: N 185th Street to 244th Street SW	Yes	Shoreline
9	20th Street NW/Timber Lane/238th Street SW: NW 196th Street to Woodway Park Road	Yes	Shoreline/ Woodway
10	Woodway Park Road: 238th Street SW to Algonquin Road	Yes	Woodway
11	244th Street SW: 100th Avenue W to SR 99	Yes	Shoreline/ Edmonds
12	8th Avenue NW: Richmond Beach Road to 244th Street SW	Yes	Shoreline
13	3rd Avenue NW : Richmond Beach Road to 244th Street SW	No	Shoreline
14	100th Avenue W: 244th Street SW to SR 104	Yes	Edmonds
15	SR 99: 224th Street SW to N 185th Street	Yes	Shoreline/ WSDOT
16	SR 99: N 175th Street to N 185th Street	Yes	Shoreline/ WSDOT

An increase in traffic volumes at intersections and roadway sections for the 2009 Proposed Action also increases the potential for collisions, because of the higher number of potential conflicts associated with vehicles. In particular, the section of Richmond Beach Drive between 15th Avenue and 3rd Avenue would need to be monitored closely, as it already experiences high collision rates and would have a significant traffic volume increase of as a result of the 2009 Proposed Action implementation.

The overall projected effect of the 2009 Proposed Action on traffic circulation is summarized as follows:

- As Richmond Beach Drive would provide the only access into and out of the site, all projected trips would travel on this roadway, so volumes are expected to increase substantially. Projections indicate that 2025 PM peak-hour volumes would slightly exceed the operational capacity of the roadway. The northern portion of the Richmond Beach Drive segment is not currently built to collector standards. It has narrower travel lanes and intermittent shoulders of varying width. This is sufficient for its current use, which is to accommodate the low number of vehicles generated by the existing industrial use of the site. The southern portion of the segment is wider, but is also built to rural standards with shoulders instead of sidewalks. For the proposed land use, this roadway would have a much higher traffic volume, and would also serve as the route for pedestrian and bicycle traffic in and out the site. In order to safely accommodate the expected mix of vehicular and non-motorized traffic for the 2009 Proposed Action, Richmond Beach Drive should be improved to urban collector standards with minimum 11-foot travel lanes and a separate pedestrian path.
- The travel model indicates that the majority of traffic generated for the 2009 Proposed Action is expected to travel on NW 196th Street/NW 195th Street/Richmond Beach Road/N 185th Street. This is the most direct path between the site and SR 99, which provides the most direct access to the regional roadway system.
- Project-generated traffic is also expected to travel on the primary north-south roads between Richmond Beach Road and SR 104. Increases are expected to occur along the 20th Avenue N/Timber Lane/Woodway Park Road corridor, but the total resulting volumes are not expected to be very high. Impacts are identified along this roadway because they exceed the adopted Woodway standard of LOS A. However, LOS B is the worst operating condition for the 2009 Proposed Action. Moderate increases in traffic volumes are also expected along the 8th Avenue NW/100th Avenue W corridor.
- Model projections indicate that increased congestion at the intersection of Richmond Beach Road and 8th Avenue NW expected for the 2009 Proposed Action would cause travelers to attempt to bypass that intersection by using NW 190th Street, which connects the two roadways one block north of their intersection. NW 190th Street is a local access street that is not intended to accommodate through-traffic. It is possible that this could also occur to a lesser degree for the No Action Alternative. However, the 2009 Proposed Action is projected to add 500 to 600 additional vehicles to this intersection during each of the peak hours. The projected increase in traffic for the

2009 Proposed Action would be expected to increase the potential for traffic increases on NW 190th Street, and thus is considered a potential impact.

- No other major paths are projected for traffic generated for the 2009 Proposed Action, although localized increases in traffic have been projected at other analysis locations.

Alternate Trip Distribution Scenario – 50/50 Split

Table 4.11-11 summarizes projected operating conditions of the analysis roadway segments for the 2009 Proposed Action with the alternative trip distribution scenario. Table 4.11-11 summarizes the projected traffic volume difference for the 2009 Proposed Action with the alternative trip distribution scenario, compared to the No Action Alternative.

Table 4.11-11.
Segment Volume Increase by the 2009 Proposed Action (Alternate Trip Distribution Scenario)

			PM Peak Hour			
	Roadway Segment	Estimated Operating Capacity[1]	No Action (veh/hr)	2009 Proposed Action with Alternate Trip Distribution (veh/hr)	Volume Increase (veh/hr)	% Increase
1	Richmond Beach Drive: Woodway City Limits to NW 196th Street	1,300	115	1,386	1,271	1,105
2	NW 196th Street: Richmond Beach Drive to NW 20th Avenue	1,500	400	1,668	1,268	317
3	NW 195th Street/Richmond Beach Road: 20th Avenues NW to 8th Avenue NW	3,400	1,060	2,028	968	91
4	Richmond Beach Road: 8th Avenue NW to SR 99	3,400	1,980	2,816	836	42
5	8th Avenue NW/NW 180th Street/6th Avenue NW: Richmond Beach Road to N 175th Avenue	1,500	940	998	58	6
6	Dayton Avenue N: Richmond Beach Road to N 175th Street/Saint Luke Place	1,700	730	790	60	8
7	Fremont Avenue N: N 175th Street to N 185th Street	1,500	885	966	81	9
8	Fremont Avenue N: N 185th Street to 244th Street SW	1,500	1,075	1,075	0	0
9	20th Street NW/Timber Lane/238th Street SW: NW 196th Street to Woodway Park Road	1,300	460	618	158	34
10	Woodway Park Road: 238th Street SW to Algonquin Road	1,300	400	533	133	33
11	244th Street SW: 100th Avenue W to SR 99	1,700	1,335	1,417	82	6
12	8th Avenue NW: Richmond Beach Road to 244th Street SW	1,700	1,120	1,198	78	7
13	3rd Avenue NW ; Richmond Beach Road to 244th Street SW	1,500	695	696	1	0

	Roadway Segment	Estimated Operating Capacity[1]	PM Peak Hour			
			No Action (veh/hr)	2009 Proposed Action with Alternate Trip Distribution (veh/hr)	Volume Increase (veh/hr)	% Increase
14	100th Avenue W: 244th Street SW to SR 104	1,700	960	983	23	2
15	SR 99: 224th Street SW to N 185th Street	4,200	3,730	4,029	299	8
16	SR 99: N 175th Street to N 185th Street	4,200	3,720	3,873	153	4

[1] Operating capacity is a planning-level estimate, based on the roadway functional classification and width. This value was estimated by applying the per-lane planning-level capacities presented in Table 3.11-1 of the Draft SEIS.

Projections for this scenario indicate that traffic volumes would increase by greater than 50 percent, as compared to the No Action Alternative, on the following segments:

- (1) Richmond Beach Drive: Woodway City Limits to NW 196th Street
- (2) NW 196th Street: Richmond Beach Drive to NW 20th Avenue
- (3) NW 195th Street/Richmond Beach Road: 20th Avenue NW to 8th Avenue NW

Greater than fifty percent of total site-generated trips (642 out of 1,284 PM peak hour trips) are projected to travel on the following roadway segments and disperse to SR 99:

- (1) Richmond Beach Drive: Woodway City Limits to NW 196th Street
- (2) NW 196th Street: Richmond Beach Drive to NW 20th Avenue
- (3) NW 195th Street/Richmond Beach Road: 20th Avenue NW to 8th Avenue NW
- (4) Richmond Beach Road: 8th Avenue NW to SR 99

Project-generated PM peak hour volumes are projected to exceed operational capacity on segment (1) Richmond Beach Road, and segment (2) the two-lane portion of NW 196th Street (west of NW 24th Avenue) for 2009 Proposed Action conditions with the alternate trip distribution scenario. As compared to the 2009 Proposed Action summarized in Table 4.11-9, no additional road segment is identified to exceed operational capacity with this alternate trip distribution scenario.

Alternative Action

The Alternative Action, described in Chapter 3 of this addendum, represents a scenario in which the intensity of development on the Point Wells property has been reduced which results in lower potential impacts on the surrounding transportation system.

Future trips generated by the Alternative Action were assumed to be lower than the 2009 Proposed Action and would follow the same general distribution to surrounding roadways as the 2009 Proposed Action with the alternate trip distribution (50/50 split). This distribution was assumed for the Alternative Action to provide a comparison to the 2009 Proposed Action and to address City of Shoreline and WSDOT concerns that the original model-generated traffic distribution (60/40 split) would result in an underestimation of project impacts on Richmond Beach Road/196th/195th/185th and SR 99.

A more detailed project-level evaluation would need to be completed as part of a specific development proposal project-level environmental review. Project-level review would include a more detailed assessment of potential impacts based on the actual development proposal, more detailed cost estimates of recommended improvements, and the commitments of the applicant and local jurisdictions to fund future improvements to provide a balance between the land use growth and roadway/intersection infrastructure improvements. Mechanisms would also be defined to ensure that the needed mitigation is implemented. It is expected that the County, applicant, and local jurisdictions would need to work closely together to determine the appropriate level of development, level of improvement needed to address the impacts of a development proposal; and commitments by all involved parties.

Traffic Forecasts

The traffic forecasts developed in the Draft and Final SEISs for the No Action Alternative and 2009 Proposed Action were used for developing future year traffic volumes within the study area for the Alternative Action. Adjustments were made to project trip generation and assignment to account for the lower intensity of uses proposed for the Alternative Action.

Land Use and Trip Generation

Traffic volumes for the Alternative Action were estimated using standard average trip generation rates from the Trip Generation Manual (Institute of Transportation Engineers 2003). Table 4.11-12 summarizes the trip generation rates used to analyze land use types expected with the Alternative Action.

Table 4.11-13 summarizes the mix of land use that was assumed for build-out of the Alternative Action and the trip generation projections of those land uses. Trips were projected by applying the rates summarized in Table 4.11-12 to the land uses summarized in Table 4.11-13. AM peak hour trips generated by the Specialty Retail Center use were estimated based on the trip generation equation for the AM peak hour of generator, since trip generation rates/equations were not provided for the AM peak hour of adjacent street traffic. Since the AM peak hour for the Specialty Retail Center is likely to occur later than the AM peak hour of adjacent street traffic, AM peak hour trip generation results shown in Table 4.11-13 for this use are likely to be conservatively high.

Table 4.11-12.
Institute of Traffic Engineers Trip Generation Rates—Alternative Action

			AM Peak			PM Peak			
ITE Land Use Category	ITE Code	Unit	ITE Average Rate	% In	% Out	ITE Average Rate	% In	% Out	Zoning Use
Residential Condominium/Townhouse	230	Dwelling Units	0.19[a]	16%	84%	0.24[b]	67%	33%	Multiple Residential
General Office Building	710	Employees	0.48[c]	88%	12%	0.46[d]	17%	83%	Service
Specialty Retail Center	814	1,000 Square Feet	6.84[e]	48%	52%	2.71[f]	44%	56%	Retail

[a] Projected trips are calculated based on the equation, Ln(T) = 0.80Ln(X) + 0.26, T = trips and X = land use.
[b] Projected trips are calculated based on the equation, Ln(T) = 0.82Ln(X) + 0.32, T = trips and X = land use.
[c] Projected trips are calculated based on the equation, Ln(T) = 0.86Ln(X) + 0.24, T = trips and X = land use.
[d] Projected trips are calculated based on the equation, T = 0.37(X) + 60.08, T = trips and X = land use.
[e] Projected trips are calculated for the AM peak hour of generator, based on the equation, T = 4.91(X) + 115.59, T = trips and X = land use.

[f] Projected trips are calculated based on the equation, T = 2.40(X) + 21.48, T = trips and X = land use.
ITE = Institute of Traffic Engineers
Source: Institute of Transportation Engineers 2003

Table 4.11-13.
Trip Generation Projections—Alternative Action

ITE Land Use Category	ITE Code	Unit	Unit Type	AM Trips[a]		PM Trips[b]	
				Inbound	Outbound	Inbound	Outbound
Residential Condominium/Townhouse	230	1,800	Dwelling Units	67	382	381	188
General Office Building	710	375	Employees	162	20	30	145
Specialty Retail Center	814	20	1,000 Square feet	52	53	14	19
Total Trips				**281**	**455**	**425**	**352**

[a] AM reductions from total trips for internal trips (6%), walk/bike (10%), and pass-by (34% of retail).
[b] PM reductions for internal trips (3%), walk/bike (10%), and pass-by (34% of retail).

The net new daily trips for all the Alternative Action would total 8,251 daily vehicle trips, which is consistent with the City of Shoreline's daily trip threshold of 8,250 vehicle trips. The Alternative Action would generate 777 PM peak hour trips and 736 AM peak hour trips.

Trip Generation Adjustments

Trips generated by the Alternative Action could use automobile, transit, or non-motorized modes. As described previously, trips generated by the Alternative Action were projected according to standard methods and rates presented in the Trip Generation Manual. ITE presents rates for vehicle trips, based upon driveway counts of representative sites for different land uses. At the ITE-observed sites, a typical level of transit and non-motorized travel would be presented that is in addition to the vehicle estimates. However, for development that departs from typical observed sites, ITE provides guidelines for making adjustments to these assumptions.

Typical ITE sites do not reflect mixed use development. Because development for the Alternative Action would be mixed use, adjustments were made in the total trips generated by the site to reflect a higher level of trips that would occur among different uses within the site. Multi-family and commercial development would be located close to each other; therefore, a greater number of non-motorized trips would be expected to occur between them. The ITE Trip Generation Handbook (Institute of Transportation Engineers 2001) provides guidelines for these adjustments, based on the mix of land use. Using these guidelines, a 10 percent reduction was applied to the total trip estimate. These reduced trips are assumed to travel within the site, and thus were not assigned to the surrounding street network.

It is expected that at full build-out, the site would have sufficient density to support transit routes to and from the site. However, because the site is geographically isolated, the analysis assumed that transit use would reflect typical levels that are already implicit in the ITE trip generation rates, so no additional reductions were made regarding regional transit access to and from the site.

Trip Distribution

As previously described, trips generated by the Alternative Action would follow the same general distribution to surrounding roadways as the 2009 Proposed Action with the alternate trip distribution that assumes approximately 50 percent of project-generated traffic would travel to/from the north Snohomish County area, and approximately 50 percent of project-generated traffic would travel to/from the south King County area. This distribution was assumed for the Alternative Action to provide a comparison to the 2009 Proposed Action

Intersection Operations

Table 4.11-14 summarizes projected 2025 intersection LOS for the Alternative Action. Year 2025 intersection LOS for the 2009 Proposed Alternative with both the 60/40 trip distribution and the alternate trip distribution scenario (50/50 split) are also shown for comparison. The table shows that operations at the nine intersections projected to exceed LOS standards for the No Action Alternative are expected to degrade further for the Alternative Action. In addition, the following two intersections projected to meet standards for the No Action Alternative are expected to exceed standards for the Alternative Action:

- (10) NW 195th Street and 15th Avenue NW,
- (12) Richmond Beach Road and 8th Avenue NW.

The two intersections are located along NW 196th Street/NW 195th Street/Richmond Beach Road in Shoreline, which is the primary route between the Point Wells site and SR 99. The 2009 Proposed Action, with either the 60/40 trip distribution or the alternate trip distribution (50/50 split), would result in higher delays at these two intersections. The NW 196th Street and 20th Avenue NW and Richmond Beach Road and 15th Avenue NW intersections would also exceed standards with the 2009 Proposed Action.

Table 4.11-14.
Year 2025 Intersection Level of Service Comparison – 2009 Proposed Action and Alternative Action

	Intersection	Existing Traffic Control	Jurisdiction	LOS Standard	2009 Proposed Action (60/40 Split)		2009 Proposed Action with Alternate Trip Distribution (50/50 Split)	Alternative Action	
					AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
1	244th Street SW and SR 99	Signal	Shoreline/ Edmonds/ WSDOT	E/D (SR 99 HSS)	F (195)	F (121)	F (129)	F (143)	F (99)
2	244th Street SW and Fremont Avenue N	NB Stop-Control	Shoreline	E	F (90)	F (107)	F (89)	E (43)	F (62)
3	Firdale Avenue N and 244th Street SW	NB Stop-Control	Edmonds	D	D (28)	C (15)	C (15)	---	---
4	244th Street SW and 100th Avenue W	EB/WB Stop-Control	Edmonds	D	C (22) / E (43)	A (11) / F (>300)	A (9) / F (123)	C (18) / D (32)	A (9) / F (109)
5	SR 104 and 100th Avenue W	Signal	Edmonds/WSDOT	D (SR 104 HSS)	F (95)	F (166)	F (146)	E (70)	F (134)
6	Algonquin Road and Woodway Park Road	EB/WB Stop-Control	Woodway	A	B (14) / B (13)	A (0) / C (18)	A (9) / C (17)	B (13) / B (11)	A (0) / C (17)
7	238th Street SW and Woodway Park Road	All-way Stop-Control	Woodway	A	A (10)	A (10)	A (10)	---	---
8	NW 196th Street and Richmond Beach Drive	WB Stop-Control	Shoreline	E	B (15)	C (23)	D (28)	B (12)	B (12)
9	NW 196th Street and 20th Avenue NW	All-way Stop-Control	Shoreline	E	E (44)	F (68)	F (90)	C (21)	D (30)
10	NW 195th Street and 15th Avenue NW	NB/SB Stop-Control	Shoreline	E	E (29) / F (105)	B (11) / F (278)	B (11) / F (>300)	D (26) / F (72)	B (11) / F (152)
11	Richmond Beach Road and 15th Avenue NW	All-way Stop-Control	Shoreline	E	D (33)	F (83)	F (69)	E (37)	D (34)
12	Richmond Beach Road and 8th Avenue NW	Signal	Shoreline	E	F (111)	F (167)	F (105)	F (90)	F (90)
13	Richmond Beach Road and 3rd Avenue NW	Signal	Shoreline	E	C (26)	B (10)	B (15)	---	---
14	Richmond Beach Road and Dayton Avenue N	Signal	Shoreline	E	B (16)	B (12)	B (13)	---	---
15	N 185th Street and Fremont Avenue N	Signal	Shoreline	E	D (36)	D (36)	D (48)	D (38)	D (39)
16	N 185th Street and SR 99	Signal	Shoreline/WSDOT	E (SR 99 HSS)	F (96)	F (106)	F (162)	F (111)	F (125)
17	N 175th Street and 6th Avenue NW	SB Stop-Control	Shoreline	E	F (70)	C (18)	C (20)	F (68)	C (18)
18	St. Luke Place N and Dayton Avenue N	EB Stop-Control	Shoreline	E	D (27)	C (15)	B (15)	---	---
19	N 175th Street and Fremont Avenue N	Signal	Shoreline	E	B (11)	A (8)	A (8)	—	---
20	N 175th Street and SR 99	Signal	Shoreline/WSDOT	E (SR 99 HSS)	D (53)	E (64)	E (69)	D (53)	E (60)
21	Carlyle Hall Road and Dayton Avenue N	All-way Stop-Control	Shoreline	E	F (113)	F (55)	F (53)	F (119)	F (54)
22	N Innis Arden Way and Greenwood Avenue N	EB Stop-Control	Shoreline	E	C (21)	B (13)	B (13)	---	---
23	N 160th Street and Greenwood Avenue N	All-way Stop-Control	Shoreline	E	F (65)	D (29)	D (28)	F (68)	D (30)

Notes: NB = northbound; SB = southbound; WB = westbound; EB = eastbound
HSS = Highway of Statewide Significance.

--- Intersections not analyzed at locations operating at LOS C or better and better than LOS standards in the year 2025 with the No Action and 2009 Proposed Action alternatives.

Roadway Segment Operations

Table 4.11-15 summarizes projected operating conditions of the analysis roadway segments for the Alternative Action. The table summarizes the projected percentage of volume difference for the Alternative Action, compared to the No Action Alternative and 2009 Proposed Action with both the 60/40 and 50/50 trip distribution (PM peak hour only)scenarios.

Projections indicate that the Alternative Action would increase traffic volumes on the following roadway segments by greater than 50 percent in the AM and PM peak hours as compared to the peak hour volumes for the No Action Alternative:

- (1) Richmond Beach Drive: Woodway City Limits to NW 196th Street
- (2) NW 196th Street: Richmond Beach Drive to NW 20th Avenue
- (3) NW 195th Street/Richmond Beach Road: 20th Avenue NW to 8th Avenue NW

More than fifty percent of total site-generated trips (368 out of 736 AM peak hour trips and 389 out of 777 PM peak hour trips) are projected to travel through the following roadway segments and disperse to SR 99:

- (1) Richmond Beach Drive: Woodway City Limits to NW 196th Street
- (2) NW 196th Street: Richmond Beach Drive to NW 20th Avenue
- (3) NW 195th Street/Richmond Beach Road: 20th Avenue NW to 8th Avenue NW
- (4) Richmond Beach Road: 8th Avenue NW to SR 99

With the Alternative Action, project-generated peak hour volumes are projected to exceed operational capacity on segment (15) SR 99: 224th Street SW to N 185th Street. With the 2009 Proposed Action with both the 60/40 and 50/50 trip distribution scenarios, site-generated PM peak hour volumes are projected to exceed operational capacity on segment (1) Richmond Beach Drive, and segment (2) the two-lane portion of NW 196th Street (west of NW 24th Avenue).

Table 4.11-16 identifies which of the analysis road segments include one or more intersections that are projected to exceed adopted LOS standards for the 2009 Proposed Action and Alternative Action. In addition to nine road segments identified for the No Action Alternative, segment (3) NW 195th Street/Richmond Beach Road: 20th Avenue NW to 8th Avenue NW includes intersections that exceed standards for the Alternative Action.

The 2009 Proposed Action would include intersections that exceed standards in the following three segments in addition to the nine road segments identified for the No Action Alternative:

- (2) NW 196th Street: Richmond Beach Drive to NW 20th Avenue,
- (3) NW 195th Street/Richmond Beach Road: 20th Avenue NW to 8th Avenue NW, and
- (9) 20th Street NW/Timber Lane/238th Street SW: NW 196th Street to Woodway Park Road.

Table 4.11-15.
Segment Volume Increase Comparison - 2009 Proposed Action and Alternative Action

	Roadway Segment	Estimated Operating Capacity[1]	AM Peak Hour					PM Peak Hour					
			No Action (veh/hr)	2009 Proposed Action with 60/40 Split (veh/hr)	% Increase	Alternative Action (veh/hr)	% Increase	No Action (veh/hr)	2009 Proposed Action with 60/40 Split (veh/hr)	% Increase	2009 Proposed Action with 50/50 Split (veh/hr)	% Increase	Alternative Action (veh/hr)	% Increase
1	Richmond Beach Drive: Woodway City Limits to NW 196th Street	1,300	110	1,085	886%	839	663%	115	1,310	1039%	1,386	1,105%	884	666%
2	NW 196th Street: Richmond Beach Drive to NW 20th Avenue	1,500	295	1,270	331%	1,024	247%	400	1,590	298%	1,668	317%	1,169	192%
3	NW 195th Street/Richmond Beach Road: 20th Avenues NW to 8th Avenue NW	3,400	785	1,640	109%	1,352	72%	1,060	1,960	85%	2,028	91%	1,658	56%
4	Richmond Beach Road: 8th Avenue NW to SR 99	3,400	1,360	1,975	45%	1,802	33%	1,980	2,150	9%	2,816	42%	2,446	24%
5	8th Avenue NW/NW 180th Street/6th Avenue NW: Richmond Beach Road to N 175th Avenue	1,500	820	855	4%	857	5%	940	935	-1%	998	6%	979	4%
6	Dayton Avenue N: Richmond Beach Road to N 175th Street/Saint Luke Place	1,700	855	865	1%	892	4%	730	800	10%	790	8%	769	5%
7	Fremont Avenue N: N 175th Street to N 185th Street	1,500	880	895	2%	924	5%	885	955	8%	966	9%	932	5%
8	Fremont Avenue N: N 185th Street to 244th Street SW	1,500	830	795	-4%	830	0%	1,075	1,085	1%	1,075	0%	1,075	0%
9	20th Street NW/Timber Lane/238th Street SW: NW 196th Street to Woodway Park Road	1,300	370	550	49%	458	24%	460	590	28%	618	34%	553	20%
10	Woodway Park Road: 238th Street SW to Algonquin Road	1,300	330	555	68%	404	22%	400	550	38%	533	33%	478	20%
11	244th Street SW: 100th Avenue W to SR 99	1,700	1,415	1,550	10%	1,489	5%	1,335	1,425	7%	1,417	6%	1,413	6%
12	8th Avenue NW: Richmond Beach Road to 244th Street SW	1,700	1,025	1,235	20%	1,113	9%	1,120	1,645	47%	1,198	7%	1,213	8%
13	3rd Avenue NW : Richmond Beach Road to 244th Street SW	1,500	1,040	1,060	2%	1,040	0%	695	705	1%	696	0%	695	0%
14	100th Avenue W: 244th Street SW to SR 104	1,700	820	920	12%	835	2%	960	1,400	46%	983	2%	976	2%
15	SR 99: 224th Street SW to N 185th Street	4,200	4,175	4,200	1%	4,344	4%	3,730	3,700	-1%	4,029	8%	3,909	5%
16	SR 99: N 175th Street to N 185th Street	4,200	3,285	3,285	0%	3,432	4%	3,720	3,700	-1%	3,873	4%	3,875	4%

[1] Operating capacity is a planning level estimate, based on the roadway functional classification and width. This value was estimated by applying the per lane planning-level capacities presented in Table 3.11-1 in the Draft SEIS.

Table 4.11-16.
2009 Proposed Action and Alternative Action Roadway Segment Operations

	Roadway Segment	Includes Intersection(s) that Exceed LOS Standard			Jurisdiction
		No Action	2009 Proposed Action	Alternative Action	
1	Richmond Beach Drive: Woodway City Limits to NW 196th Street	No	No	No	Shoreline/ Woodway
2	NW 196th Street: Richmond Beach Drive to NW 20th Avenue	No	Yes	No	Shoreline
3	NW 195th Street/Richmond Beach Road: 20th Avenues NW to 8th Avenue NW	No	Yes	Yes	Shoreline
4	Richmond Beach Road: 8th Avenue NW to SR 99	Yes	Yes	Yes	Shoreline
5	8th Avenue NW/NW 180th Street/6th Avenue NW: Richmond Beach Road to N 175th Avenue	Yes	Yes	Yes	Shoreline
6	Dayton Avenue N: Richmond Beach Road to N 175th Street/ Saint Luke Place	No	No	No	Shoreline
7	Fremont Avenue N: N 175th Street to N 185th Street	No	No	No	Shoreline
8	Fremont Avenue N: N 185th Street to 244th Street SW	Yes	Yes	Yes	Shoreline
9	20th Street NW/Timber Lane/238th Street SW: NW 196th Street to Woodway Park Road	No	Yes	No	Shoreline/ Woodway
10	Woodway Park Road: 238th Street SW to Algonquin Road	Yes	Yes	Yes	Woodway
11	244th Street SW: 100th Avenue W to SR 99	Yes	Yes	Yes	Shoreline/ Edmonds
12	8th Avenue NW: Richmond Beach Road to 244th Street SW	Yes	Yes	Yes	Shoreline
13	3rd Avenue NW : Richmond Beach Road to 244th Street SW	No	No	No	Shoreline
14	100th Avenue W: 244th Street SW to SR 104	Yes	Yes	Yes	Edmonds
15	SR 99: 224th Street SW to N 185th Street	Yes	Yes	Yes	Shoreline/ WSDOT
16	SR 99: N 175th Street to N 185th Street	Yes	Yes	Yes	Shoreline/ WSDOT

An increase in traffic volumes at intersections and roadway sections for the Alternative Action also increases the potential for collisions, because of the higher number of potential conflicts associated with vehicles. In particular, the section of Richmond Beach Drive between 15th Avenue and 3rd Avenue would need to be monitored closely, as it already experiences high collision rates and would have a traffic volume increase with the Alternative Action.

The overall projected effect of the Alternative Action on traffic circulation is summarized as follows:

- As Richmond Beach Drive would provide the only access into and out of the site, all projected trips would travel on this roadway, so volumes are expected to increase substantially. Projections indicate that year 2025 PM peak-hour volumes would still meet the operational capacity of the roadway. The northern portion of the Richmond Beach Drive segment is not currently built to collector standards. It has narrower travel lanes and intermittent shoulders of varying width. This is sufficient for its current use, which is to accommodate the low number of vehicles generated by the existing industrial use of the site. The southern portion of the segment is wider, but is also

built to rural standards with shoulders instead of sidewalks. For the Alternative Action, this roadway would have a much higher traffic volume, and would also serve as the route for pedestrian and bicycle traffic in and out the site. In order to safely accommodate the expected mix of vehicular and non-motorized traffic for the Alternative Action, Richmond Beach Drive should be improved to urban collector standards with minimum 11-foot travel lanes and a separate pedestrian path.

- The traffic forecasts indicate that the majority of traffic generated for the Alternative Action is expected to travel on NW 196th Street/NW 195th Street/Richmond Beach Road/N 185th Street. This is the most direct path between the site and SR 99, which provides the most direct access to the regional roadway system.
- Traffic generated for the Alternative Action is also expected to travel on the primary north-south roads between Richmond Beach Road and SR 104. Increases are expected to occur along the 20th Avenue N/Timber Lane/Woodway Park Road corridor, but the total resulting volumes are not expected to be very high. Impacts are identified along this roadway because they exceed the adopted City of Woodway standard of LOS A. However, LOS B is the worst operating condition for the Alternative Action. Increases in traffic volumes are also expected along the 8th Avenue NW/100th Avenue W corridor.
- No other major paths are projected for traffic generated with the Alternative Action, although localized increases in traffic have been projected at other analysis locations.

4.11.3 Mitigation Measures

Roadway Improvement Projects

Roadway improvement projects for No Action and the 2009 Proposed Action were identified in the Draft and Final SEIS at any location at which a potential significant impact on roadway operations had been identified. Roadway improvement projects for the Alternative Action have been similarly identified in this SEPA Addendum. If improvement projects recommended for the No Action Alternative were not found to be sufficient to accommodate projected future demand for the 2009 Proposed Action or Alternative Action, additional mitigation measures were identified as needed. Mitigation measures include changes in traffic control (such as upgrades from stop control to a traffic signal) or increases to the capacity of an intersection or roadway segment that may involve multiple jurisdictions. Some of the mitigation measures identified to address capacity issues would also improve safety conditions. However, additional safety mitigation measures might be required to address potential safety issues resulting from higher traffic volumes on roadway sections and intersections, such as Richmond Beach Drive. Safety improvements are likely to involve traffic calming devices such as improved signing, bulb-outs, speed humps, medians, or traffic circles.

Table 4.11-17 summarizes the improvements that have been identified in the Draft and Final SEISs to mitigate impacts for the 2009 Proposed Action and the No Action Alternative. Improvements identified to mitigate impacts for the Alternative Action are also provided in Table 4.11-17.

Table 4.11-17.
Recommended Mitigation for the No Action Alternative, 2009 Proposed Action, and Alternative Action

	Location	Jurisdiction	No Action Alternative[a]	2009 Proposed Action (60/40 Split)	2009 Proposed with Alternate Scenario (50/50 Split)	Alternative Action
Intersections						
1	244th Street SW and SR 99	Shoreline/ Edmonds/ WSDOT	Restripe northbound right-turn lane to through right lane. Add a southbound through lane, a southbound right-turn lane, a 2nd eastbound left-turn lane, and a westbound right-turn lane.	No Action Alternative improvement would also address 2009 Proposed Action impacts.	No Action Alternative improvement would also address 2009 Proposed with Alternate Scenario impacts.	No Action Alternative improvement would also address Alternative Action impacts.
2	244th Street SW and Fremont Avenue N	Shoreline	Install a signal.	No Action Alternative improvement would also address 2009 Proposed Action impacts.	No Action Alternative improvement would also address 2009 Proposed with Alternate Scenario impacts.	No Action Alternative improvement would also address Alternative Action impacts.
4	244th Street SW and 100th Avenue W	Edmonds	Install all-way stop-control. Add northbound and southbound through lanes.	No Action Alternative improvement plus install a signal.	Same as No Action Alternative improvement.	No Action Alternative improvement plus install a signal.
5	SR 104 and 100th Avenue W	Edmonds/ WSDOT	Add a northbound through lane, an eastbound right-turn lane, and a 2nd westbound left-turn lane.	No Action Alternative improvement plus add a westbound right-turn lane.	Same as No Action Alternative improvement.	No Action Alternative improvement plus add a westbound right-turn lane.
6	Algonquin Road and Woodway Park Road	Woodway	Install all-way stop control.	No Action Alternative improvement plus add a northbound through lane.	No Action Alternative improvement plus add a northbound through lane.	No Action Alternative improvement plus add a northbound through lane.
9	NW 196th Street and 20th Avenue NW	Shoreline	—	Install a signal and add eastbound and westbound left-turn lanes.	—	—
10	NW 195th Street and 15th Avenue NW	Shoreline	—	Install a signal and coordinate with intersection below.	Install a signal and coordinate with intersection below.	Install a signal and coordinate with intersection below.
11	Richmond Beach Road and 15th Avenue NW	Shoreline	—	Install a signal and coordinate with intersection above.	Install a signal and coordinate with intersection above.	Install a signal and coordinate with intersection above.
12	Richmond Beach Road and 8th Avenue NW	Shoreline	—	Add a southbound right-turn lane, a 2nd eastbound left-turn lane, and northbound right-turn lane.	Add a southbound right-turn lane and a northbound right-turn lane.	Add a southbound right-turn lane, a 2nd eastbound left-turn lane, and northbound right-turn lane.
16	N 185th Street and SR 99	Shoreline/ WSDOT	Add a 2nd southbound left-turn lane.	No Action Alternative improvement plus add a westbound right-turn lane.	No Action Alternative improvement plus add a westbound right-turn lane and a 2nd eastbound left-turn lane.	No Action Alternative improvement plus add a westbound right-turn lane.

	Location	Jurisdiction	No Action Alternative[a]	2009 Proposed Action (60/40 Split)	2009 Proposed with Alternate Scenario (50/50 Split)	Alternative Action
17	N 175th Street and 6th Avenue NW	Shoreline	Install a signal.	No Action Alternative improvement would also address 2009 Proposed Action impacts.	No Action Alternative improvement would also address 2009 Proposed with Alternate Scenario impacts.	No Action Alternative improvement would also address Alternative Action impacts.
21	Carlyle Hall Road and Dayton Avenue N	Shoreline	Install a signal.	No Action Alternative improvement would also address 2009 Proposed Action impacts.	No Action Alternative improvement would also address 2009 Proposed with Alternate Scenario impacts	No Action Alternative improvement would also address Alternative Action impacts
23	N 160th Street and Greenwood Avenue N	Shoreline	Install a signal.	No Action Alternative improvement would also address 2009 Proposed Action impacts.	No Action Alternative improvement would also address 2009 Proposed with Alternate Scenario impacts	No Action Alternative improvement would also address Alternative Action impacts
Roadway Segments						
	Richmond Beach Drive, between the site and the Woodway/Shoreline city limits (~2,600 feet)	Shoreline/ Woodway	—	Widen to urban collector standards with 11-foot lanes and separate pedestrian pathway.	Widen to urban collector standards with 11-foot lanes and separate pedestrian pathway.	Widen to Urban collector standards with 11-foot lanes and separate pedestrian pathway
	NW 196th Street, between Richmond Beach Drive and 24th Avenue NW (~900 feet)	Shoreline	—	Widen from two lanes to four lanes.	Widen from two lanes to four lanes.	—
	NW 190th Street, between NW Richmond Beach Road and 8th Avenue NW (~1,100 feet)	Shoreline	—	Install traffic calming devices.	Install traffic calming devices.	Install traffic calming devices

[a] No Action Alternative travel demand assumptions were conservative to allow a conservative assessment of potential cumulative impacts for the 2009 Proposed Action and Alternative Action. Future vehicle volumes for the No Action Alternative may end up being lower than those reflected in this analysis, due to regional and local transit enhancements and other demand-oriented strategies. In this case, it is possible that (1) the need for some mitigation measures may not be triggered due to cumulative conditions being for lower than what was programmatically evaluated; or (2) some mitigation measures identified in the No Action Alternative may alternatively be triggered by the 2009 Proposed Action or the Alternative Action. Subsequent project-level analysis, based on the actual proposed development levels and phasing, would be needed to determine the appropriate agency and applicant commitments to future transportation improvements and to provide implementing mechanisms for ensuring those commitments.

Because this was a programmatic assessment, the projects listed in Table 4.11-17 were intended to provide a conservatively high order-of-magnitude estimate of the level of mitigation that could be needed with full build-out of development assumed for the No Action Alternative, 2009 Proposed Action, and Alternative Action. These measures were developed for the purpose of illustration, and do not represent commitments by the affected jurisdictions or by the applicant.

Also, as described earlier in this chapter, the Draft and Final SEIS No Action Alternative travel demand assumptions provide a conservatively high assessment of the combined impacts with the Proposed Action and Alternative Action. Future vehicle volumes for the No Action Alternative may end up being lower than those reflected in the Draft and Final SEIS analysis due to regional and local transit enhancements and other demand-oriented strategies. In this case, it is possible that (1) the need for some mitigation measures may not be triggered due to cumulative conditions being lower than what was programmatically evaluated; or (2) some mitigation measures identified for the No Action Alternative may alternatively be triggered by the 2009 Proposed Action or Alternative Action.

It is expected that if the proposed land use designation and zoning are approved, subsequent project-level environmental analysis would include detailed analysis to identify recommended improvements needed to support the actual development proposal, and could include demand-oriented measures as well as capacity improvements. It would also include more detailed analysis to determine the appropriate agency and applicant commitments to future transportation improvements, based on the actual proposed development levels and phasing, and provide implementing mechanisms to ensure those commitments.

Tables 4.11-18, 4.11-19, and 4.11-20 summarize the intersection LOS projected with the identified capacity improvement projects in place for the No Action Alternative, 2009 Proposed Action, and the Alternative Action respectively. The tables show that the recommended measures are expected to fully mitigate identified impacts so that all analysis intersections would operate within the adopted standards of the local jurisdictions.

Table 4.11-18.
No Action Alternative Peak Hour Intersection Level of Service—Mitigated

	Intersection	Juris-diction	LOS Standard	Mitigated Traffic Control	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
1	244th Street SW and SR 99	Shoreline/ Edmonds/ WSDOT	E/D (SR 99 HSS)	Signal	D (54)	D (50)
2	244th Street SW and Fremont Avenue N	Shoreline	E	Signal	A (10)	A (9)
4	244th Street SW and 100th Avenue W	Edmonds	D	All-Way Stop-Control	B (11)	C (15)
5	SR 104 and 100th Avenue W	Edmonds/ WSDOT	D (SR 104 HSS)	Signal	D (40)	D (53)
6	Algonquin Road and Woodway Park Road	Woodway	A	All-Way Stop-Control	A (8)	A (10)

	Intersection	Juris-diction	LOS Standard	Mitigated Traffic Control	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
16	N 185th Street and SR 99	Shoreline/ WSDOT	E (SR 99 HSS)	Signal	D (49)	E (79)
17	N 175th Street and 6th Avenue NW	Shoreline	E	Signal	F (57)	C (17)
18	St. Luke Place N and Dayton Avenue N	Shoreline	E	EB Stop-Control	C (24)	B (14)
21	Carlyle Hall Road and Dayton Avenue N	Shoreline	E	Signal	B (11)	A (8)
22	N Innis Arden Way and Greenwood Avenue N	Shoreline	E	EB Stop-Control	D (28)	B (15)
23	N 160th Street and Greenwood Avenue N	Shoreline	E	Signal	C (25)	C (23)

Notes: NB = northbound; SB = southbound; WB = westbound; EB = eastbound
HSS = Highway of Statewide Significance.

Table 4.11-19.
2009 Proposed Action[a] Peak Hour Intersection Level of Service—Mitigated

	Intersection	Juris-diction	LOS Standard	Mitigated Traffic Control	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
1	244th Street SW and SR 99	Shoreline/ Edmonds/ WSDOT	E/D (SR 99 HSS)	Signal	E (73)	D (50)
2	244th Street SW and Fremont Avenue N	Shoreline	E	Signal	B (16)	B (10)
4	244th Street SW and 100th Avenue W	Edmonds	D	Signal	A (5)	A (8)
5	SR 104 and 100th Avenue W	Edmonds/ WSDOT	D (SR 104 HSS)	Signal	D (47)	D (53)
6	Algonquin Road and Woodway Park Road	Woodway	A	All-Way Stop-Control	A (9)	A (10)
9	NW 196th Street and 20th Avenue NW	Shoreline	E	Signal	A (10)	C (20)
10	NW 195th Street and 15th Avenue NW	Shoreline	E	Signal	A (10)	B (11)
11	Richmond Beach Road and 15th Avenue NW	Shoreline	E	Signal	A (7)	A (9)
12	Richmond Beach Road and 8th Avenue NW	Shoreline	E	Signal	D (51)	D (53)
16	N 185th Street and SR 99	Shoreline/ WSDOT	E (SR 99 HSS)	Signal	E (62)	E (77)
17	N 175th Street and 6th Avenue NW	Shoreline	E	Signal	A (8)	A (8)
21	Carlyle Hall Road and Dayton Avenue N	Shoreline	E	Signal	B (11)	A (8)
23	N 160th Street and Greenwood Avenue N	Shoreline	E	Signal	C (25)	C (24)

Notes: NB = northbound; SB = southbound; WB = westbound; EB = eastbound
HSS = Highway of Statewide Significance.

[a] LOS analysis was not conducted for the 2009 Proposed Action Alternate Scenario (50/50 Split) with mitigation in the Final SEIS.

Table 4.11-20.
Alternative Action Peak Hour Intersection Level of Service—Mitigated

	Intersection	Juris-diction	LOS Standard	Mitigated Traffic Control	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
1	244th Street SW and SR 99	Shoreline/ Edmonds/ WSDOT	E/D (SR 99 HSS)	Signal	E (59.9)	D (53)
2	244th Street SW and Fremont Avenue N	Shoreline	E	Signal	C (24)	B (13)
4	244th Street SW and 100th Avenue W	Edmonds	D	Signal	B (12)	C (18)
5	SR 104 and 100th Avenue W	Edmonds/ WSDOT	D (SR 104 HSS)	Signal	D (39)	D (43)
6	Algonquin Road and Woodway Park Road	Woodway	A	All-Way Stop-Control	A (8)	A (9)
10	NW 195th Street and 15th Avenue NW	Shoreline	E	Signal	A (9)	A (5)
11	Richmond Beach Road and 15th Avenue NW	Shoreline	E	Signal	A (5)	A (8)
12	Richmond Beach Road and 8th Avenue NW	Shoreline	E	Signal	E (63)	D (44)
16	N 185th Street and SR 99	Shoreline/ WSDOT	E (SR 99 HSS)	Signal	E (73)	E (75)
17	N 175th Street and 6th Avenue NW	Shoreline	E	Signal	B (16)	B (12)
21	Carlyle Hall Road and Dayton Avenue N	Shoreline	E	Signal	B (14)	B (11)
23	N 160th Street and Greenwood Avenue N	Shoreline	E	Signal	B (16)	B (18)

Notes: NB = northbound; SB = southbound; WB = westbound; EB = eastbound
HSS = Highway of Statewide Significance.
--- Intersections not analyzed at locations operating at LOS C or better and better than LOS standards in the year 2025 with the No Action and 2009 Alternative Action alternatives.

Other Potential Mitigation Considered

Additional Transit at Site

It is possible that future enhanced transit service between the site and other regional destinations could reduce some of the additional capacity needed as a result of the Point Wells site. As discussed earlier in this section, build-out of mixed-use development with the proposed land use designation and zoning would be expected to provide adequate density to support transit service at the site. Reduction in regional trips as a result of mixed use on the site was included in the analysis assumptions for the 2009 Proposed Action and Alternative Action. However, the location and characteristics of the site do not provide any basis for assuming that the share of transit demand to regional destinations would be any greater than is typical of similar uses implicit in the ITE trip generation assumptions. Any commitment to enhanced demand-oriented measures is not appropriate at a programmatic level of analysis because there is no mechanism by which to tie such commitments to approval of the 2009 Proposed Action or Alternative Action, which is simply the zoning land use designation and zoning change (and not the actual development, which would be covered by subsequent project-level analysis). Thus, an assumption of transit mode share greater than what is already implicit in the ITE trip generation assumptions was not considered to be reasonable at this programmatic level.

Also, while commuter rail service extends directly through the site, construction of a train station to allow direct rail service at the site was not considered reasonable in the foreseeable future. Sound Transit proposed a "provisional" station at Point Wells, including up to 120 surface parking stalls, as part of *Sound Move*. A station was estimated to cost approximately $60 million (Sound Transit 2005). However, this provisional station was not part of the Sound Transit 2 (ST2) Plan, which is the voter-approved program of Sound Transit improvements through 2023 (Sound Transit 2009). Thus, based on the existing adopted plan, Sound Transit has not indicated any plan to build a station at this location. If a station were to be considered, a detailed feasibility study would be needed to assess not only if the site had adequate demand to justify a commuter rail station, but also the implications of additional demand to the area that would be expected to result. For these reasons, train service at the site was not considered to be a feasible mitigation measure within the 2025 time frame evaluated in the Draft and Final SEISs.

Planning-Level Cost of Capacity Improvements

Under the GMA, local jurisdictions can require new development to pay its proportionate costs of improvements that are triggered by that development, as a condition of approval. Table 4.11-21 presents planning-level cost estimates that were developed for the capacity mitigation projects. The costs presented for the 2009 Proposed Action are in addition to the costs identified for the No Action Alternative. The assumptions and calculations for these cost estimates are provided in Appendix F of the Draft SEIS. It should be noted that these estimates are very broad, and are intended to provide a conservatively high order-of-magnitude estimate of the potential improvement costs.

As discussed earlier in this chapter, the roadway mitigation measures were developed for the purpose of illustration, and do not represent commitments by the affected jurisdictions or by the applicant. Also, future vehicle volumes for the No Action Alternative may end up being lower than those reflected in this analysis due to regional and local transit enhancements and other demand-oriented strategies. In this case, it is possible that (1) the need for some mitigation measures may not be triggered due to cumulative conditions being lower than what was programmatically evaluated; or (2) some mitigation measures identified for the No Action Alternative may alternatively be triggered by the 2009 Proposed Action and/or Alternative Action.

Because this is a non-project action, the intent is to provide an order-of-magnitude assessment of potential impacts and mitigation. If the proposed land use designation and zoning are approved, a site-specific development proposal would still need to be provided, which would be subject to detailed project-level environmental analysis. The project-level analysis would include a more detailed assessment of potential impacts based on the actual development proposal, more detailed cost estimates of recommended improvements, the commitments of the applicant and local jurisdictions to fund future improvements, as well as any needed limits on development levels to ensure the balance between travel demand and infrastructure. Mechanisms would also be identified to ensure that the needed mitigation is implemented. It is expected that the County, applicant, and local jurisdictions would work closely together

to determine the appropriate level of development, level of improvement needed to address impacts of a site-specific development proposal, and commitments required by all involved parties.

Table 4.11-21.
Cost Estimates for Recommended Mitigation Projects

Location/Jurisdiction	No Action Project Costs[a,c]	2009 Proposed Action (60/40 Split) Project Costs[a,b]	2009 Proposed Action Alternate Scenario (50/50 Split) Project Costs[a,b]	Alternative Action Project Costs[a,b]
Shoreline				
244th Street SW and Fremont Avenue N	$580,000	$580,000	$580,000	$580,000
NW 196th Street and 20th Avenue NW	---	$2,030,000	$2,030,000	---
NW 195th Street and 15th Avenue NW	---	$580,000	$580,000	$580,000
Richmond Beach Road and 15th Avenue NW	---	$580,000	$580,000	$580,000
Richmond Beach Road and 8th Avenue NW	---	$2,087,500	$1,000,000	$2,087,500
N 175th Street and 6th Avenue NW	$580,000	$580,000	$580,000	$580,000
Carlyle Hall Road and Dayton Avenue N	$580,000	$580,000	$580,000	$580,000
N 160th Street and Greenwood Avenue N	$580,000	$580,000	$580,000	$580,000
NW 196th Street, between Richmond Beach Drive and 24th Avenue NW	---	$2,035,000	$2,035,000	---
NW 190th Street, between NW Richmond Beach Road and 8th Avenue NW	---	$100,000	$100,000	$100,000
Edmonds				
244th Street SW and 100th Avenue W	$3,605,000	$4,185,000	$3,605,000	$4,185,000
Woodway				
Algonquin Road and Woodway Park Road	$5,000	$1,805,000	$1,805,000	$1,805,000
Shoreline and WSDOT				
N 185th Street and SR 99	$962,500	$1,462,500	$2,550,000	$1,462,500
Shoreline and Woodway				
Richmond Beach Drive, between the site and NW 196th Street	---	$1,655,000	$1,655,000	$1,655,000
Edmonds and WSDOT				
SR 104 and 100th Avenue W	$1,587,500	$2,087,500	$1,587,500	$2,087,500
Shoreline, Edmonds, and WSDOT				
244th Street SW and SR 99	$3,447,500	$3,447,500	$3,447,500	$3,447,500
Total Costs	**$11,927,500**	**$24,375,000**	**$23,295,000**	**$20,310,000**

[a] All costs are presented in 2008 dollars.

[b] Costs listed under the 2009 Proposed Action and Alternative Action include improvements listed under the No Action Alternative.

[c] No Action Alternative travel demand assumptions were conservative, to allow a conservative assessment of potential cumulative impacts under the 2009 Proposed Action and Alternative Action. Future vehicle volumes under the No Action Alternative may end up being lower than those reflected in this analysis, due to regional and local transit enhancements and other demand-oriented strategies. In this case, it is possible that (1) the need for some mitigation measures may not be triggered due to cumulative conditions being lower than what was programmatically evaluated; or (2) some mitigation measures identified under No Action Alternative may alternatively be triggered by the 2009 Proposed Action or Alternative Action. Subsequent project-level analysis would be needed to determine the appropriate agency and applicant commitments to future transportation improvements, based on the actual proposed development levels and phasing, and provide implementing mechanisms to ensure those commitments.

As part of a project-level assessment, new development may be required to contribute to the cost of improvements in proportion to its contribution of vehicle trips to the deficiencies being mitigated. In addition, at the project level, if additional demand-oriented measures were developed as an alternative to some of the capacity improvement, construction of infrastructure and/or provision of services needed to implement them could be identified as a condition of development approval.

Consistency with City of Shoreline Comprehensive Plan Subarea Plan 2 – Point Wells Transportation Master Plan

The City of Shoreline submitted several comments on the Draft SEIS transportation analysis. Included in the comments was a basic assumption that the background growth estimates (approximately 1.5 percent annual growth) used in the Draft SEIS transportation analysis were too high, given that Shoreline is already "built out" and traffic counts indicate that traffic volumes have been declining in the past few years. In addition, the City of Shoreline did not agree with the trip distribution assumptions and overall mitigation findings in the Draft SEIS. In response to the Draft SEIS, the City Shoreline conducted a traffic and safety analysis in 2009 using a 0.25 percent annual traffic growth factor, This analysis, included as Attachment A to this addendum, evaluated eight different residential growth scenarios to explore the transportation effects of various levels of residential development and the associated trips. As an outcome of this analysis, the City of Shoreline presented improvement recommendations in two categories: Mitigation Projects for All Scenarios and Mitigation Projects Required for 825 [PM Peak Hour] Trips and Above. The findings in the traffic and safety analysis, though based on a PM peak hour analysis, led to the conclusion that if more than 8,250 vehicle trips a day enter the City's road network from the Point Wells development, a City intersection would degrade to LOS F, which would be an unacceptable impact.

The Alternative Action would generate 8,251 net new daily trips, which is consistent with the City's 8,250 daily trip threshold. For the PM peak hour, the 777 PM peak hour trips generated by the Alternative Action (as shown in Table 4.11-13) would fall well below the City's acceptable PM peak hour trip threshold of 825 PM peak hour trips.

4.11.4 Significant Unavoidable Adverse Impacts

Both the 2009 Proposed Action and the Alternative Action would be expected to result in increased traffic in the vicinity of the Point Wells site. Although the effects of additional vehicles on traffic congestion can be mitigated to varying degrees through the recommended transportation improvements, the actual increase in traffic is considered a significant unavoidable adverse impact. The PM peak hour traffic generation increase for the 2009 Proposed Action is approximately 65 percent higher than the Alternative Action, so the potential for Unavoidable Adverse Impacts is higher for the 2009 Proposed Action.

4.12 Public Services and Utilities

Additional details about public services and utilities are described in Section 3.12 of the Draft SEIS.

4.12.1 Affected Environment

Emergency Services

The County Sheriff's Office South Precinct has jurisdiction over the Point Wells site. The precinct is headquartered in Mill Creek, approximately 10 miles northeast of the site. The average response time by the Sheriff's Office to this area is 5 to 10 minutes (Ter-Veen pers. comm.). However, the Shoreline Police Department has provided first response police services to the Point Wells site since 2001 because of its proximity. The Shoreline Police Station is approximately 3 miles southeast of the site, and the Department also operates a neighborhood police center, staffed by an officer and community volunteers, in Richmond Beach, approximately 1 mile from the site.

According to the Snohomish County Fire Marshal, the Point Wells site is not currently within the boundaries of any of the municipal fire departments or rural fire districts of the County (Snohomish County Fire Marshal pers. comm.). The two municipal fire departments that are close to the site are the Edmonds Fire Department, which serves Woodway, and the Shoreline Fire Department. The Shoreline Fire Department (King County Fire District #4) is contracted to provide fire suppression and emergency medical service to the site. The nearest Shoreline Fire Department response facility is Fire Station 64, located approximately 2.25 miles southeast of the Point Wells site. The station is equipped with one pumper engine, one basic life support vehicle, and one advanced life support vehicle.

Parks

The adopted level of service standard for parks in the County is one additional community park per 21,000 additional residents (Snohomish County 2007b). According to the 2007 Snohomish County Parks Comprehensive Plan, no County-owned parks are located in the immediate vicinity of the Point Wells site. The existing parks most conveniently located to the Point Wells site are Richmond Beach Center Park and Richmond Beach Saltwater Park which are located 0.5 mile southeast and 0.9 mile south–southeast, respectively, in the City of Shoreline in King County.

In Snohomish County, Point Edwards Park is located approximately 1 mile north of the site in Woodway and City Park is located approximately 1 mile north of the site in Edmonds. The nearest County park is Esperance Park, a community park of 6.2 acres, about a 5-mile drive to the northeast of the Point Wells site.

Schools

The Point Wells site is located within the boundaries of Edmonds School District #15. Students in the area attend Sherwood Elementary, College Place Middle School, and Edmonds-Woodway High School.

In recent years, Sherwood Elementary and Edmonds-Woodway High School have been at or above capacity.

Utilities

Utilities infrastructure for water, sewer, solid waste, telecommunications, electricity, and natural gas are limited or are not currently present on the Point Wells site. BSRE Point Wells, LC has confirmed that the necessary utilities would be available in the future.

The Point Wells site is served by the Olympic View Water and Sewer District, which provides water to Woodway and the adjacent unincorporated portion of the County. According to Woodway's 2004 Comprehensive Plan (revised in 2008), the District obtains its water from the City of Seattle, but maintains inter-ties with the City of Edmonds to draw on the Everett regional system in case of emergencies (Woodway 2008).

Part of the upland section of the Point Wells site, east of the railroad tracks, is currently served by 8-inch, 10-inch, and 4-inch ductile iron water lines. The main industrial lowland area of the site is not currently served by existing infrastructure (Olympic View Water and Sewer District 2003).The Olympic View Water and Sewer District would identify capital improvements necessary to adequately serve development on the Point Wells site.

The Point Wells site is located in Sewer Basin 24 of the Ronald Wastewater District (RWD). RWD serves Shoreline in King County and the immediate vicinity of the site in unincorporated Snohomish County. RWD's Lift Station 13 is located at 20454 Richmond Beach Drive NW, approximately 0.2 mile south–southwest of the site, and currently handles flows from four upland residential parcels in addition to the facilities on the Point Wells site. The lift station was last upgraded in 1996. Except for the lift station, very little sanitary sewer infrastructure exists in the vicinity of the site.

Solid waste collection in the vicinity of the Point Wells site is handled by Allied Waste of Lynnwood, which provides garbage, recycling, and yard waste collection services to the surrounding communities. Allied Waste operates a recycling center south of Seattle and transports non-recyclable materials to the Roosevelt Regional Landfill in Klickitat County.

Communication services at the industrial facility on the Point Wells site are currently provided by Verizon under a franchise from the Washington Utilities and Transportation Commission (WUTC). Verizon offers telephone and data service to all communities in the County, using a combination of copper and fiber-optic lines. In addition, Comcast Cable and Qwest Communications also offer services in the surrounding communities. All major United States wireless communication companies provide mobile telephone service in the area.

Electrical power in the County is provided by the Snohomish County Public Utility District. Natural gas service in the southwest portion of the County is provided by Puget Sound Energy (PSE).

4.12.2 Impact Analysis

Impacts with the Alternative Action would be similar to, but less than, impacts described in Section 3.12 of the Draft SEIS for the 2009 Proposed Action because the density of development and traffic generation would be less.

Emergency Services

The anticipated development and population increase with the Alternative Action would require additional patrols and more police officers than are currently assigned to the site, and would generate a greater demand for fire protection and emergency medical services.

Based on information from the Snohomish County Sheriff's Department, population associated with potential development for the 2009 Proposed Action would require approximately six additional deputies and associated equipment to adequately provide 24-hour police protection services and meet national standards for response times. The Alternative Action would likely need fewer resources as the number of housing units and population would be approximately half of what is proposed for the 2009 Proposed Action. Deputies serving the site would be officially based out of the Department's South Precinct in Mill Creek, but would likely make use of a "storefront" in the immediate vicinity of the Point Wells, similar to Shoreline Police Department's operation in Richmond Beach. This solution would allow the deputies to provide rapid response without requiring the construction of a new police station. The Snohomish County Sheriff's Department estimates that annual costs for this additional service would be approximately $700,000 for the first year, with costs declining over time as capital expenditures, such as additional patrol cars and equipment, are paid down (Beidler pers. comm.; ICF Jones and Stokes 2009a).

If the Point Wells site is redeveloped to higher intensity uses, the Shoreline Police Department and Fire Department have indicated that they will discontinue its service to the site because the current service agreement is based on the Paramount site's existing use as an asphalt and petroleum facility (ICF Jones and Stokes 2009a). A new service agreement could be negotiated. These impacts would be the similar to those described for the 2009 Proposed Action in Section 3.12 of the Draft and Final SEISs.

Impacts on fire service would depend on the scale of development. Firefighting and protection of residents in high-rise buildings (over 75 feet in height) require specialized equipment, training, and generally a higher number of fire fighters to respond to an incident (FEMA 1996). Additional equipment, personnel, and training would be required of any of the fire service providers in the vicinity that may provide service to the proposed development.

Parks

Changing the designation and zoning to allow redevelopment of the site as an Urban Village would increase population and generate additional demand for parks and recreation facilities in the area. A variety of park facilities would be used by residents. The Snohomish County 2001 Comprehensive Parks Plan has taken a non-traditional approach to level of service, which takes into account projected population growth. Unfortunately, the growth from the proposed development was not included in the

current plan projections or facility needs (Snohomish County 2005b). Shoreline uses a service area approach in planning for parks and notes a deficiency for neighborhood parks in many areas of the city (Shoreline 2011).

Given its location near the Point Wells site, the parks most likely to be affected include the Kayu Kayu Ac Park about 0.25 mile from the site. Richmond Beach Saltwater Park (approximately 1.5 miles by car) also would be affected by any increase in demand for passive parks activities generated under the Alternative Action. Demand for active recreation, such as sports events using ball fields, is likely to be absorbed by a variety of parks. These parks include Richmond Beach Community Park in Shoreline, about 0.75 mile from the site, and City Park in Edmonds, about 4 driving miles from the site.

While this population increase anticipated with the Alternative Action is below the level of service threshold for requiring an additional community park, a variety of additional recreational facilities would be required to serve the additional residents.

The impacts would be similar but less than the 2009 Proposed Action, which could potentially generate the need for additional parkland as described in Section 3.12 of the Draft and Final SEISs.

Schools

Redevelopment with the Alternative Action could support up to 1,800 new housing units. Using a student generation rate of 0.157 per unit could add up to 283 new students in the Edmonds School District. The increased population would contribute to an overall increase in demand for education services. The 2009 Proposed Action would have slightly higher impacts and the potential to add up to 549 students because it would have more housing units.

Utilities

The development of a concentrated residential population and commercial area with the Alternative Action has the potential to generate significant impacts on water and wastewater service. The developer would be responsible for installing the new utility infrastructure on the site.

Olympic View Water and Sewer District projections of future population and water demand assume approximately 77.3 gallons per capita per day of residential water consumption. Based on a potential population of 3,312, the Alternative Action could generate an additional demand for 0.26 million gallons per day, not including commercial demand. The Olympic View Water and Sewer District's supply contract with Seattle allows them to draw as much water as is required to satisfy demand. While adequate supply exists to support future growth, the infrastructure is not adequate to meet the anticipated needs of the high-density development anticipated with the Alternative Action. In addition to domestic supply, fire flows are likely to be the critical factor in determining the infrastructure needs for water supply.

In addition, the demand for wastewater transmission and treatment with the Alternative Action would exceed the capacity of both existing infrastructure and currently planned capital improvements for sewer basin 24 of the Ronald Wastewater District. A project-level review would be required to determine the

precise water and sewer demand needs and cost of extending the infrastructure (ICF Jones & Stokes 2009b).

The change in land use with the Alternative Action would generate additional demand for communication services, particularly telephone and cable. Additional demand for wireless communication in the area could be satisfied without the construction of project-specific infrastructure. Construction of new residential structures and commercial buildings would require the extension of fiber-optic lines and television/data cables throughout the site. Project-level review and coordination with service providers would be needed to ensure that demand is met.

The anticipated development with the Alternative Action would increase the level of solid waste generation. A population increase of 3,312 might generate an estimated 2,325 tons of solid waste per year while the 2009 Proposed Action with a population of 6,442 could generate an estimated 4,500 tons (Snohomish County 2004). Project-level review would be needed to more accurately estimate the additional tonnage and coordinate with solid waste providers. However, the Roosevelt Regional Landfill has substantial unused storage capacity to meet this demand. No significant impacts on solid waste service are anticipated.

The 2009 Proposed Action would generate a slightly higher demand for utilities because it would have more housing units.

4.12.3 Mitigation Measure

Emergency Services

Prior to any future development for the proposed Alternative Action, the property owner shall enter into an agreement with the Snohomish County Sheriff's Department stating that the property owner will provide a commercial storefront in the immediate vicinity of the Point Wells site for use by deputies patrolling this area. Depending on the exact market value of the commercial space, cost-free use of this storefront may be considered, and may be associated with the partial or full payment of impact fees.

To ensure adequate fire protection and emergency medical services prior to any future development, the Point Wells site would either be assigned to one of the rural fire districts by the County or contract with one of the adjacent municipalities. The developer would provide documentation to the Snohomish County Department of Planning and Development that identifies the municipality or fire district responsible for providing fire and emergency medical services at the site. The County shall verify that the identified agency has an equipment, personnel, and training plan that provides the capacity to respond to emergency calls at the Point Wells site in a timely manner, particularly for the special needs posed by high-rise buildings.

Parks

Future development on the Point Wells site would be required to comply with the Snohomish County Code, which sets forth development impact fees and related park dedication requirements proportionate

to the size of the proposed development. These code provisions, however, were developed based on population demand projections that did not include this project. Mitigation for recreation impacts may be required at the development phase of the project. In addition, the Shoreline Master Program requires public access along the water.

Future development on the site may also include parks and/or open space dedication as integral parts of the Urban Village design. In addition, both the Snohomish County and Shoreline Parks Departments should be consulted during the design process. Additional parks and open space dedications may be made in lieu of impact fees (ICF Jones & Stokes 2009a, 2009b). Open space and recreation facilities may be required to mitigate specific impacts identified during the project specific environmental review.

Any development may be required to provide parks and open space amenities on site that allow for active recreational activities. Examples include, but are not limited to, ball fields, playgrounds, and tennis courts. The site also has the potential to provide water-oriented public access and recreation on site that would serve a larger geographic area. In that case, other types of recreational facilities could be provided by existing parks or upgraded facilities off site (ICF Jones & Stokes 2009a).

Schools

The school district monitors upcoming development within its jurisdiction and regularly updates its Capital Facilities Plan to adequately reflect anticipated growth. The Edmonds School District projects no unhoused students by the end of the 6-year forecast period, and does not project the need for additional capital facilities to accommodate growth (Edmonds School District 2010).

While the school district does not currently collect impact fees, the County should coordinate with the district to ensure that future development for the Alternative Action is included in capital facilities planning efforts and identify potential funding measures for necessary improvements, including collection of impact fees.

Utilities

The anticipated future development for the Alternative Action would require coordination with the Olympic View Water and Sewer District and RWD. The utilities would need to incorporate updates to the Capital Facilities Plan to ensure that future facilities have adequate capacity for the proposed demand. Project-level infrastructure needs and necessary upgrades would need to be identified and appropriate mitigation measures would need to be determined when a specific development plan is proposed.

Residential development of the Point Wells site would require extension and connection of water and sewer services to the site. In addition, the water systems may need to be upgraded to meet fire flow and storage requirements. The RWD Comprehensive Sewer Plan indicates that a pre-design study shall be conducted to determine if Lift Station 13 will require additional capacity for future development or if another lift station should be constructed. Potential mitigation could include the preparation of this study

by the developer or a designated consultant, construction and dedication of the necessary infrastructure, or payment of impact fees to the RWD to defray the costs of construction (ICF Jones & Stokes 2009b).

Future development is anticipated to incorporate green technologies intended to reduce wastewater volumes and the amount of land required for wastewater treatment. Specific methods and technologies would be evaluated during project-level review (ICF Jones & Stokes 2009b).

The developer would be required to coordinate with service providers to ensure that adequate communication services are available at the site. The developer would also need to install additional infrastructure, such as transmission lines and transformers, for electrical service. The developer would coordinate with PSE to potentially extend natural gas service into the Point Wells area; although, natural gas service is not required to support development.

4.12.4 Significant Unavoidable Adverse Impacts

The Alternative Action and 2009 Proposed Action would both have the potential for significant unavoidable adverse impacts. Population growth and development with either alternative would increase the need for police, fire fighting, and emergency medical services. Development would increase water and energy consumption and create the need for utility infrastructure to serve the site. However, with a higher population the 2009 Proposed Action would have a greater potential for impacts compared to the Alternative Action.

Development would result in an overall increase in demand for electric and natural gas infrastructure. Future development would undergo project-level review to determine precise power and natural gas consumption and infrastructure requirements and any applicable impact fees. Mitigation measures would reduce these impacts.

With mitigation, no significant unavoidable adverse impacts on parks, schools, wastewater, or communication services are anticipated. No mitigation measures or adverse impacts are anticipated for solid waste collection services.

The No Action Alternative anticipates a small increase in employment at the site, which has the potential to result in a slight increase in water and sewer demand over existing conditions. Small changes in utility demand are not anticipated to result in any significant unavoidable adverse impacts. However, project-level review would be required to determine water and fire-flow requirements for any new development.

4.13 Land and Shoreline Use Patterns

4.13.1 Affected Environment

The proposed amendment to the Comprehensive Plan would change the future land use map designation from Urban Industrial to Urban Village and a change of zoning from Heavy Industrial to Planned Community Business. This would change the allowed uses and potential future development on the site. Project-level review would be required for future development proposals.

The Point Wells site is located in unincorporated Snohomish County. The site is in the southwest corner of the Snohomish County Urban Growth Area (UGA). The land immediately east of the site in Woodway consists primarily of vacant or undeveloped land and single-family residential development (generally 0.25-acre lots or larger). Land to the southeast of the site is in Shoreline, and also consists of primarily single-family residential development. The boundary between Snohomish County and King County is immediately south of the Point Wells property.

Woodway's land use goals and policies are designed for single-family residential development that keeps density low to preserve a more rural lifestyle. The land to the east and northeast of the Point Wells site is designated as Forested Residential Park, Suburban Residential, and Conservation on the town's Future Land Use and Zoning map.

Shoreline's Comprehensive Plan designates the land southeast of the Point Wells site as Low Density Residential. The area is zoned for six units per acre (R-6).

The BNSF railroad right-of-way is the dominant feature along the shoreline to the south of the Point Wells site. The majority of the shoreline in this area is under the direct ownership of BNSF Railway. The shoreline area to the north of Point Wells is mostly undeveloped. The BNSF railroad, which runs between the shore and the base of the bluff to the east, continues to be the primary feature. Land uses at the top of the bluff are primarily single-family residences.

The County's Shoreline Management Master Program designates the shoreline on the Point Wells site as Urban, which is intended to absorb higher-density development while protecting and restoring ecological functions, as well as providing appropriate public access to and recreational use of the shoreline environment. Additional details are described in Section 3.13 of the 2009 Draft and Final SEISs.

4.13.2 Impact Analysis

The land zoned and used for industrial purposes would be lost if the future land use and zoning is changed with the Alternative Action. The loss of this industrial property could create additional demand for a similar facility in the region.

The presence of high-density residential and commercial uses close to the lower density neighborhoods in Shoreline and Woodway could adversely affect low-density residential uses by creating increased noise, light and glare, and traffic congestion in the area. If the proposed Urban Village is established, the concentration of commercial, office, and residential uses could attract additional development to nearby areas. While the development with the Alternative Action would create a higher density than currently exists in the surrounding areas, the uses proposed would be more compatible with surrounding development than the industrial uses currently on the site. The development with the Alternative Action would be nearly half of what was outlined as a potential development scenario for the 2009 Proposed Action with the Urban Center designation.

The proposed amendment would not change the shoreline designation. However, the increased density anticipated with the Alternative Action is higher than seen in surrounding shoreline environments. The development would be likely to result in use of the shoreline area for recreation or residential uses, as opposed to industrial use. Residential and recreational uses would be more compatible with the ecological restoration objectives of the adjacent Woodway Urban Conservancy designation.

Impacts with the Alternative Action would be similar but less than the impacts discussed for the 2009 Proposed Action in Section 3.13 of the Draft SEIS.

4.13.3 Mitigation Measures

Project-specific mitigation measures may be needed to address future development and would be reviewed at the time that an application is processed. Potential mitigation measures to reduce impacts on land use patterns could include:

- Implementation of traffic calming and noise abatement measures as a condition of development permit approval to reduce vehicular impacts on nearby residential development;
- Establishment of a medium-density transitional area surrounding the Urban Village to provide a buffer between high and low densities; and
- Application of design standards or design review to minimize design incompatibilities with surrounding uses (ICF Jones & Stokes 2009b).

Mitigation measures would follow the County's Shoreline Management review process. Potential mitigation measures to reduce incompatibilities with surrounding shoreline designations could include:

- Locating higher-intensity shoreline uses away from the northern edge of the Point Wells site, which borders Woodway's Urban Conservancy designation.

4.13.4 Significant Unavoidable Adverse Impacts

The Alternative Action and 2009 Proposed Action represent a change of land use for the Point Wells site and a permanent loss of waterfront industrial property. However, there are no significant unavoidable adverse impacts on shoreline use patterns for any of the alternatives.

4.14 Relationship to Plans and Policies

Plans and policies that guide development in the County include:

Federal
Endangered Species Act

State
Growth Management Act
Shoreline Management Act
State Environmental Policy Act

County

Countywide Planning Policies
Snohomish County GMA Comprehensive Plan and General Policy Plan
Snohomish County Code Title 30 Unified Development Code
Snohomish County Shoreline Management Master Plan

ESA provisions related to fisheries are discussed in Section 3.4 of the Draft SEIS. The policies and plans discussed below focuses on consistency of the Alternative Action with the Comprehensive Plan and related City of Shoreline functional plans and policies, GMA goals, the CPPs and the General Policy Plan.

4.14.1 Reviewed Plans and Policies

This section is based on the information provided in the 2009 Draft and Final SEISs (ICF Jones & Stokes 2009a, 2009b) with updates to incorporate the Alternative Action and proposed Urban Village designation.

Growth Management Act

The GMA, chapter 36.70A RCW, is based on several planning goals, which must be considered when developing comprehensive plans and development regulations. Goals address urban growth, sprawl reduction, efficient multimodal transportation systems, housing availability and affordability, economic development, property rights, timely and fair permit processes, natural resource industries, open space and recreation, environmental protection, citizen participation, public facilities and services, and historic preservation.

Jurisdictions subject to planning under the GMA are required to prepare and adopt CPPs. The County adopted its CPPs in 1993. Comprehensive plans for each jurisdiction in a county must be consistent with the CPPs. The Snohomish County Plans and Regulations section below describes the County's comprehensive plan and CPPs.

The comprehensive plan serves as the guide for local government staff and elected officials in making decisions regarding ordinances, regulations, and public facility investments to ensure that the overall goals and policies are furthered by those decisions. To implement a comprehensive plan, development regulations and capital facility plans need to be prepared. The GMA specifically requires critical area and natural resource ordinances protecting environmental, agricultural, forestry, and mineral resources (ICF Jones & Stokes 2009b).

Shoreline Management Act

A local Shoreline Management Master Program (SMMP) is required by the Shoreline Management Act (SMA), chapter 90.58 RCW, for "Shorelines of the State" (Shorelines of the State are defined in RCW 90.58.030). An SMMP must include goals and policies related to shoreline uses, conservation, economic development, public access, recreation, circulation, and housing. Development regulations for specific shoreline uses must be included as well.

The SMA addresses priorities for shoreline uses. An SMMP must give preference to uses, in the following order of preference (ICF Jones & Stokes 2009b):

1. Recognize and protect the statewide interest over local interest.
2. Preserve the natural character of the shoreline.
3. Result in long-term over short-term benefit.
4. Protect the resources and ecology of the shoreline.
5. Increase public access to publicly owned areas of the shorelines.
6. Increase recreational opportunities for the public on the shoreline.
7. Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

Snohomish County Plans and Regulations

Countywide Planning Policies

CPPs were adopted by the County in 1993 and have been periodically amended. These policies are important because they establish Urban Growth Areas (UGAs) and employment growth targets for each jurisdiction within the UGAs.

Comprehensive Plan

The County adopted its first GMA Comprehensive Plan in June 1995 and has periodically amended it, including the required 10-year update, which was adopted in December 2005. The GMA Comprehensive Plan includes required and optional elements as follows: Land Use (addressing Urban, Rural, and Resource Lands), Population and Employment, Housing, Transportation, Capital Facilities, Utilities, Economic Development, Natural Environment, Interjurisdictional Coordination, and Siting of Essential Public Facilities.

Shoreline Management Master Program

The Snohomish County SMMP became effective in 1974. The most recent comprehensive update was adopted by the County Council in June 2012. It applies to regulated water bodies and shorelands within 200 feet of the ordinary high water mark (OHWM) of regulated water bodies, called "shorelines of the state." Shoreline environments are mapped and designated as Urban, Suburban, Rural, Conservancy, or Natural. Use regulations vary by the shoreline environment that applies to the shorelands (ICF Jones & Stokes 2009b).

Development Regulations

Snohomish County is proposing to amend chapter 30.31A SCC to add optional performance standards in the Planned Community Business zone when it is located in land designated Urban Village on the FLUM. The County is also proposing to repeal SCC 30.34A.085, which includes the later-introduced amendments to SCC 30.34A.085, which section was itself an amendment to the Urban Center ordinance as originally proposed and as the Planning Commission had originally transmitted to the County Council.

The two later-introduced amendments to SCC 30.34A.085 changed the proposed distance to public transportation from ¼- to ½-mile and allowed a van-pool option, both of which the GMHB found non-compliant with SEPA because the environmental impacts from those later-introduced amendments had not been considered. SCC 30.34A.085 is not needed to implement the Urban Center development regulations because it was originally adopted to address specific issues related to Point Wells. Because Point Wells will be re-designated as an Urban Village and rezoned as Planned Community Business, SCC 30.34A.085 will be repealed in its entirety. Thus, the SEPA non-compliance in that code section would become moot.

The comprehensive plan amendment would re-designate the Point Wells site from Urban Center to Urban Village, which would allow more intense development on the site than allowed under the historical Urban Industrial designation, but less intense development than allowed under the Urban Center designation. Development under the Urban Village designation would be similar to, but less intense than, the type of development allowed under the Urban Center designation that was proposed in the previous ordinances and analyzed in the 2009 Final SEIS. Urban Villages are neighborhood scale clusters with a mix of high density residential, retail and office uses, and public and community facilities. Urban Centers are more concentrated developments where a substantial amount of population and employment growth can be located, providing a community-wide focal point and supported by increased transit use, bicycling, and walking. The zoning would also be changed to Planned Community Business rather than to Urban Center.

4.14.2 Discussion of Relationship to Plans and Policies

The primary focus of section 4.14.3 is to address consistency of the current docket proposal for designation of the Point Wells site as an Urban Village with applicable policies in the GMA Comprehensive Plan and General Policy Plan. When relevant, GMA and SMA goals and requirements or the County's SMMP policies are also cited.

An analysis of consistency with plans and policies from the adjacent Town of Woodway (Woodway), which is in the County, is also included because Point Wells is part of Woodway's Municipal Urban Growth Area (MUGA). An analysis of consistency with plans and policies from Shoreline is included because Shoreline includes Point Wells in its Potential Area of Annexation and because RCW 36.70A.100 requires external consistency, particularly as the vehicle access to the site is through Shoreline.

No analysis is included for the No Action Alternative since it would retain existing GMA Comprehensive FLUM and zoning designations, and since the current designations were applied on the basis of policies in the adopted GMA Comprehensive Plan and General Policy Plan (ICF Jones & Stokes 2009b). No analysis of the policy and code changes for the 2009 Proposed Action is included because the county is rescinding the previously adopted ordinances and is pursuing designation of the site as an Urban Village rather than an Urban Center.

Under the proposed amendments to the Urban Village policies and Planned Community Business regulations, there would be a two tier evaluation of impacts. Issues related to whether the Point Wells site is an appropriate location for an Urban Village are evaluated in terms of the policies of the Shoreline Master Program, the General Policy Plan, Countywide Planning Policies, and GMA Comprehensive Plan; which address the location of specific land use type and intensity. The issues related to the provision of necessary services and public facilities, as well as public services provided by entities other than the county are deferred, pursuant to Policy LU 3.C.5, to the time of development approval for specific project phases. This policy allows the development intensity to be tied to implementation of specific Capital Facilities Plan elements including provision of roadway, transit, utility and public service facilities. In the second tier, the specific impacts associated with the mix of uses in the high development scenario evaluated as part of the 2009 Proposed Action or the moderate development scenario evaluated as part of the Alternative Action would be evaluated during review of a specific development proposal.

4.14.3 Affected Plans and Policies Consistency Analysis

Snohomish County Shoreline Management Master Program (SMMP) – Master Program Elements

Future development applications would be required to comply with the SMMP's shoreline environment designations, policies, and regulations (adopted by the Snohomish County Council in June 2012) for the following elements:

Transportation, Circulation, and Parking Facilities

The transportation and circulation element addresses the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other public facilities, all correlated with the shoreline use element. The transportation system provides access to shoreline areas and scenic viewpoints but at the same time can damage shoreline ecological functions. The transportation goals and policies must balance the requirements needed to support shoreline uses with the protection of the shoreline ecology.

Conservation and Monitoring Element

The conservation element provides an overarching framework to implement the county's multifaceted approach to environmental protection as adopted in the comprehensive plan. The multifaceted approach includes interjurisdictional cooperation and planning; regulatory and non-regulatory programs including education and incentives; restoration and enhancement programs; and ecological monitoring.

The conservation element considers the preservation of natural resources and ecological functions, including but not limited to scenic vistas, aesthetics, and vital estuarine areas for fisheries and wildlife protection.

Shoreline Use Element

The shoreline use element considers the proposed general distribution and location and extent of uses on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land. These general provisions establish the framework for approval of land use projects within shoreline jurisdiction that is consistent with the overall principals in the SMA and guidelines and with the county's comprehensive plan.

Cultural, Archaeological, and Historic Element

The cultural resources element includes historic, cultural, archaeological, scientific, and educational elements for the protection and restoration of buildings, sites, and areas having historic, cultural, scientific, or educational values.

Public Access Element

This public access element addresses provisions for public access to publicly owned areas with the goals to:

- Provide safe, convenient and diversified access for the public to the publicly owned shorelines of Snohomish County and assure that the intrusions created by public access will recognize the rights of private property owners, will not endanger life, and will not adversely affect fragile natural areas.
- Provide the public opportunities to enjoy the physical and aesthetic qualities, including views, of shorelines of the state consistent with the other goals and policies of this Program.

Recreational Element

Recreation uses are those that provide facilities for athletic activities, hobbies or other entertainment that provide relaxation or enjoyment of leisure time as a primary use. Recreation uses include both publicly and privately owned shoreline facilities intended for use by the public or a private club, group, association or individual. Commercial uses that are clearly incidental to the recreation use such as concession stands or boat rental shall be considered part of the recreational use.

Shoreline Use Element

The shoreline use element considers the proposed general distribution and location and extent of uses on shorelines and adjacent land areas for housing, business, industry, transportation, agriculture, natural resources, recreation, education, public buildings and grounds, and other categories of public and private uses of the land. These general provisions establish the framework for approval of land use projects within shoreline jurisdiction that is consistent with the overall principals in the SMA and guidelines and with the county's comprehensive plan.

Snohomish County Shoreline Management Master Program (SMMP)–Urban Environment Designation Criteria

The site of the Alternative Action is designated as an Urban Environment in the SMMP, a designation that includes areas of high-intensity land use. This environment is particularly suitable for those areas presently subjected to extremely intensive use pressure and to areas planned to accommodate urban expansion. Shoreline areas to be designated as an Urban Environment should possess one or more of the following criteria:

- areas of high-intensity land use including recreation, residential, public facility, commercial, industrial development and intensive port activities;
- areas designated in the adopted plans of public agencies for expansion of urban uses;
- areas possessing few biophysical limitations for urban development; and
- areas that can provide the necessary infrastructure of public services and utilities and access to accommodate urban development.

Urban Environment Management Policies

1. Because shorelines suitable for urban uses are a limited resource, emphasis should be given to directing new development into already developed, but underutilized areas.
2. Give priority in Urban Environments to water dependent, industrial and commercial uses requiring frontage on navigable waters.
3. Give priority to planning for and developing public visual and physical access to the shoreline in the Urban Environment.
4. Identify needs and plan for the acquisition of urban land for permanent public access to the water in the Urban Environment.
5. Design industrial and commercial facilities to permit pedestrian waterfront activities where appropriate.
6. Link, where practical, public access points with nonmotorized transportation routes such as bicycle and hiking paths.

Consistency: The Point Wells site is designated as an urban shoreline environment in the SMMP. It is now, and has been for many decades, used for industrial purposes as a petroleum products storage facility, processing and distribution operation. The Alternative Action would redevelop the site for an Urban Village comprising a mix of high density residential and commercial uses with required public circulation, facilities, and open space.

The proposed Urban Village comprehensive plan designation is consistent with one or more of the urban shoreline environment criteria. The proposed designation would allow for a continuation of intensified use

of the site. Mixed-use development would provide the opportunity for public physical access to the adjacent shoreline that was previously not available. Necessary public services, utilities, and access would be required to accommodate the proposed development of an Urban Village. Since the site is fully developed, the Alternative Action is consistent with the urban shoreline environment as there are few biophysical limitations for future urban development. Redevelopment of the site under the Urban Village designation could result in potential restoration in the shoreline setback area.

The Alternative Action consistency analysis regarding the Urban Environment Management Policies follows:

1. The Alternative Action would bring new development into an underdeveloped area and is consistent with this policy.
2. The Alternative Action is not a priority Urban Environment land use as Urban Villages are not water-dependent and do not require frontage on navigable waters. However, the Alternative Action could result in the future development of permanent public access to the shoreline, which is not available with the No Action Alternative. The Alternative Action would promote the redevelopment and renewal of an obsolete urban shoreline area that could accommodate future water-dependent activities and make maximum use of the available shoreline resource. Therefore, the Alternative Action is partially consistent with this policy.
3. If public access to the waterfront is provided with future development, this policy would be consistent with the proposal.
4. If permanent public access is required of future development, the Alternative Action would be consistent with this policy. See policy 3 above.
5. See policy 3 above.
6. If pedestrian and bicycle connectivity is required of future development, the Alternative Action would be consistent with this policy.
7. The Alternative Action allows a mixed-use development and is consistent with this policy.
8. The Alternative Action would allow redevelopment of the site but the mixed-use development anticipated would not target water-dependent users, so the Alternative Action is consistent with portions of this policy.
9. Design controls are in place for Urban Villages, so the Alternative Action is consistent with this policy.
10. Regulations are in place to monitor impacts on adjacent land and shoreline so the Alternative Action is consistent with this policy.

General Policy Plan, Countywide Planning Policies, and GMA Comprehensive Plan

The following General Policy Plan, CPPs, and GMA Comprehensive Plan policies are the most relevant to the Alternative Action to redesignate the Point Wells site FLUM designation of Urban Center to an Urban Village. (The action in the 2009 Final SEIS was resignation from Urban Industrial to Urban Center.)

General Policy Plan – Land Use

Objective LU 2.C. Encourage intensification and revitalization of existing and planned commercial and industrial areas.

LU Policy 2.C.1 – The County shall encourage expansion, revitalization, redevelopment, and intensification of existing areas, with special focus on those located within designated centers and along transit emphasis corridors, before new sites are designated and zoned.

> Consistency: The Alternative Action would make the existing industrial site eligible for redevelopment and intensification as an Urban Village and is, therefore, consistent with LU Policy 2.C.1.

LU Policy 2.C.2 – The majority of new commercial development shall be accommodated as mixed use in Urban Centers, and/or Urban Village or adjacent to transit stations or within transit emphasis corridors (see also policies under objectives LU 2.B, LU 3.A, LU 4.A and 4.B).

> Consistency: The Alternative Action is consistent with LU Policy 2.C.2. This alternative would allow the development of a new Urban Village which would accommodate new commercial development in a mixed use development. Location in a Urban Village does not also require transit service.

Objective LU 3.A. Plan for Urban Centers within unincorporated UGAs consistent with Vision 2020 and the CPPs.

The current proposal is for an Urban Village rather than an Urban Center and therefore this objective would no longer apply to the Alternative Action.

Objective LU 3.C. Plan for Urban Villages within unincorporated UGAs

LU 3.C.1 – Urban Villages shall be planned as compact ((~~approximately three to 25 acres in size,~~)) pedestrian-oriented areas within designated Urban Growth Areas. Urban Villages are generally smaller than an Urban Center and provide an intermediate level of commercial or other services for an existing community, or take advantage of unique characteristics of an area that provide opportunities for higher intensity development with public benefits of open space or other public amenities. The development will include a variety of small-scale commercial and office uses, public buildings, high-density residential units, and public open space. Pedestrian orientation includes circulation, scale and convenience with connections between neighborhoods, communities and other centers. Urban Villages should also include urban services and reflect high quality urban design. Urban Villages serve several neighborhoods within a radius of about two miles. Urban Villages will develop/redevelop over time and may develop in phases.

Consistency: The Point Wells site with the Alternative Action meets the locational criteria for the siting of an Urban Village. The site is compact in size and urban services are available. Because there is no site-specific proposal, it is not possible to evaluate the other criteria at this time. The Alternative Action is consistent with LU Policy 3.C.1.

LU 3.C.2 – Urban Villages shall be located where access to transportation facilities are available or can be improved based on the demands of the specific site and intensity of development and shall be designed to maximize use of nearby transit facilities. Locations may be on or adjacent to a minor arterial road, within one-fourth mile of existing or planned access to local transit service, or within one-half mile of a high capacity transit station.

Consistency: The Point Wells site is not currently located on or adjacent to a minor arterial, it is within about 0.4 mile of existing local transit service. The City of Shoreline, through which access to the site would be provided, has designated Richmond Beach Drive between NW 199th Street and NW 205th Street as a local road in Point Wells Policy PW 12. The policy indicates, however, that the City could reclassify the road segment after review of a Transportation Corridor Study and Mitigation Plan called for in Policy and commitment of financing for necessary mitigation. Policy LU 3.C.5 (below) further provides that public facilities (including transit, sewer, water, stormwater, roads and pedestrian improvements, parks, trails and open space) will be considered at the time of development approval of specific phases of a project and further provides that the intensity of development may be tied to implementation of specific elements of Capital Facilities Plans of jurisdictions such as Shoreline.

The distance to the local transit service could be decreased to less than one-fourth mile. In addition, the site is located adjacent to Sounder commuter rail, providing the possibility of a station on a regional high-capacity transit route.

The provisions of policy LU 3.C.2, which addresses location of Urban Villages in relation to providing access to transportation facilities are available or can be improved based on the specific site and intensity of development, together with policy LU 3.C.5, which addresses provision of adequate public services at the time of development, provide a mechanism for interjurisdictional coordination for transportation services needed by the Alternative Action consistent with LU Policy 3.C.2.

LU 3.C.3 – Residential net densities shall be at least 12 dwelling units per acre; maximum densities may be established as part of more detailed planning.

Consistency: The Point Wells site includes densities greater than 12 dwelling units per acre. The Alternative Action is consistent with LU Policy 3.C.3.

LU 3.C.4 – Additional Urban Villages may be designated in the future through amendments to the comprehensive plan.

Consistency: The Point Wells site would not affect additional Urban Villages being designated in the future.

LU 3.C.5 – Urban Villages will be implemented through application of appropriate zoning classifications, provision of necessary services and public facilities (including transit, sewer, water, stormwater, roads and pedestrian improvements, parks, trails and open space) and protection of critical areas. The county will identify and apply methods to facilitate development within designated Urban Villages, including targeting of public facilities such as transit, parks and road improvements. Provision of needed public services provided by entities other than the county shall be incorporated in the Capital Facilities Plans of the service providers and may be planned and programmed in phases. Capital Facilities Plans shall provide for urban services needed at the time of development approval of specific phases of a project. The intensity of development may be tied to implementation of specific elements of Capital Facilities Plans including provision of roadway, transit, utility and public service facilities.

Consistency: The Alternative Action will be implemented through the Planned Community Business regulations. Proposed additional Planned Community Business zone performance standards for properties designated Urban Village in SCC 30.31A.115 cross reference some of the standards in chapter 30.34A SCC for Urban Centers. The proposed development of the Point Wells site as an Urban Village will require compliance with all applicable procedures and standards including the provision of necessary services and public facilities. The provision of services by entities other than the county must be available at the appropriate time during development, rather than at the time of Comprehensive Plan designation and application of zoning. The Alternative Action is consistent with LU Policy 3.C.5.

LU 3.C.7 – The Urban Village at Point Wells will be developed to provide a location for high intensity residential development oriented to the amenities of Puget Sound with a mix of uses to serve the development and the surrounding neighborhoods. It will provide neighborhood-serving businesses and service providers. The urban village will provide public access to Puget Sound available to the larger regional population and provide for ecological restoration appropriate to the site. Uses proposed must be supported by adequate transportation facilities including local bus service or customized transit.

Consistency: This policy indicates how the designation of the Point Wells site meets the Urban Village policies and identifies specific public benefits of the designation. Provision of designated site features and requirements for adequate transportation facilities must be met at the time of development approval and will be coordinated with the appropriate agencies. The Alternative Action is consistent with LU Policy 3.C.7.

Objective LU 5.B. Recognize unique land use issues within specific UGAs as identified in previously adopted subarea plans and/or studies.

LU Policy 5.B.12 – Within the Southwest UGA, parcels designated Urban Industrial (on Point Wells) shall be considered for future re-designation from Urban Industrial to Urban ((~~Center~~)) Village designation upon issuance of a programmatic non-project environmental impact statement addressing environmental impacts, infrastructure and the provision of urban services.

Consistency: The policy requires addressing permitting considerations before considering redesignation of the Point Wells site to Urban Village. Comprehensive plan land use designations are generally analyzed at the programmatic/non-project level which includes an assessment of "permitting considerations" that must be addressed in future development applications. In the programmatic/non-project assessment the ability of a future application to meet specific standards is addressed, but not compliance with specific standards, which is not possible absent a specific development application. Generally permitting considerations would include building bulk, setbacks, critical areas, shorelines, landscaping, infrastructure improvements, transportation, and mitigation. There are no circumstances which have been developed which would prevent a future application from meeting all of the codified development regulations. The exact manner in which a future development meets those standards must be deferred to review of a specific application.

Objective HO 1.B. Ensure that a broad range of housing types is available in urban and rural areas.

Consistency: The Alternative Action would allow the development of high density residential units, which would add to the range of housing types available in the urban area. The Alternative Action is consistent with Objective HO 1.B.

Objective HO 1.D. Maintain an adequate supply of appropriately zoned developable land.

Consistency: The Alternative Action would rezone the site to Planned Community Business (PCB). The PCB zoning designation allows for high-density residential and mixed use development in an existing urban growth area. Allowing additional high intensity development reduces the total amount of land required to meet the county's residential growth requirements in the existing Urban Growth Area and contributes to providing an adequate supply of land. The Alternative Action is consistent with Objective HO 1.D.

HO Policy 1.D.3 – The County shall encourage expeditious and efficient infill development in UGAs.

Consistency: The Alternative Action would allow infill redevelopment of an unincorporated "island" between Woodway and Shoreline. The Alternative Action is consistent with Policy 1.D.3.

<u>General Policy Plan – Transportation</u>

Objective TR 1.A. Prepare, in cooperation with the cities, the Washington State Department of Transportation (WSDOT), regional agencies, Sound Transit, Community Transit, and Everett Transit, standards for public transportation services and facilities consistent with adopted road standards, the land use element, and the natural environment element of the county's comprehensive plan.

TR Policy 1.A.1 – Public transportation planning shall be integrated with land development review and the design and maintenance of public roads.

TR Policy 1.A.2 – Public transportation shall be extended throughout the urban area at a level of service appropriate to the planned form and intensity of development.

Objective TR 1.C. Establish access and on-site circulation standards to maintain the safety and integrity of the arterial roadway system.

TR Policy 1.C.1 – A countywide network of primary corridors shall be identified that provide for multi-modal transportation services between centers designated on the comprehensive plan.

Objective TR 2.A. In cooperation with the cities, make the designated centers the focus of residential and employment growth and transportation investment in unincorporated county areas.

TR Policy 2.A.1 – Roadways serving designated centers shall be redesigned, improved, and maintained as primary corridors for multi-modal travel.

TR Policy 2.A.2 – A transit-supportive transportation system shall be provided linking designated centers.

TR Policy 2.A.4 – An interconnected system of high-occupancy vehicle (HOV) lanes and treatments shall be provided to serve the designated centers and transportation centers within the urban area.

TR Policy 2.A.5 – A regionally coordinated system of bikeways and walkways shall be planned to serve the designated centers and transportation centers.

Objective TR 2.B. In cooperation with the cities, promote a variety of convenient transportation services to compact and attractively designed centers.

TR Policy 2.B.2 – High-occupancy vehicle use and alternatives to single-occupancy vehicles shall be promoted in centers through higher density single family and multi-family developments.

Objective TR 5.D. Participate with the cities, transit agencies, Sound Transit and WSDOT in a cooperative planning process for public transportation and high-capacity transit.

TR Policy 5.D.3 – Development review shall be performed with transit agency participation to ensure site plan compatibility with public transportation and other high-occupancy vehicles.

Consistency: The County has adopted a Transportation Element as part of the Comprehensive Plan and a concurrency and road impact mitigation regulation (chapter 30.66B SCC) which requires land use to be compatible with road capacity and with policies for serving transportation demand by high occupancy vehicles and transit. The objectives and policies enumerated above emphasize the desire to focus growth in the County toward attractively designed, designated centers that contain high-density housing and good transportation accessibility and efficiency including transit, HOV lanes, bike paths, and walkways.

The Alternative Action could provide opportunities for residential and employment growth as the Urban Village designation allows and encourages high density residential and mixed use development. The Draft SEIS, Final SEIS, and this addendum analyzed, at a programmatic level, the transportation improvements that may be necessary for both the Alternative Action and No Action Alternative.

Proposed policy 3.C.2 for Urban Villages provides for a location where access transportation facilities are available or can be improved based on the demands of the specific site and intensity of development and shall be designed to maximize use of nearby transit facilities. Locations may be on or adjacent to a minor arterial road, within one-fourth mile of existing or planned access to local public transit service, or within one-half mile of a high capacity transit station.

Further transportation planning would be integrated with the development review at the time of application. This programmatic analysis, and additional specific analysis for a specific development proposal would provide the basis to meet the City of Shoreline Point Wells Policy PW 12 by providing the Transportation Corridor Study and Mitigation Plan and commitment of financing for necessary mitigation required for the City of Shoreline to reclassify Richmond Beach Drive for higher traffic volumes. Proposed policy 3.C.5 for Urban Villages specifies that needed public services provided by entities other than the county shall be provided at the time of development approval of specific phases of a project. The development intensity of future specific development applications may be tied to implementation of specific elements of Capital Facilities Plans including provision of roadway, transit, and utility and public service facilities.

Also, see Section 4.14.4 below outlining possible mitigation measures to achieve consistency with policies requiring interjurisdictional coordination. Based on the points outlined, the Alternative Action is consistent with the transportation policies.

Countywide Planning Policies (CPPs)

DP-1. The County shall maintain Urban Growth Areas (UGAs), as shown on the map in Appendix A, that:

a. When aggregated at the time of 10-year updates, shall include additional capacity to accommodate at least 100 percent, but no more than 115 percent, of the County's adopted 20-year urban allocated population growth projection;

b. Include all cities in Snohomish County;

c. Can be supported by an urban level of service consistent with capital facilities plans for public facilities and utilities;

d. Are based on the best available data and plans regarding future urban growth including new development, redevelopment, and infill;

e. Have identifiable physical boundaries such as natural features, roads, or special purpose district boundaries when feasible;

f. Do not include designated agricultural or forest land unless the city or County has enacted a program authorizing transfer or purchase of development rights;

g. Have been evaluated for the presence of critical areas;

h. Where possible, include designated greenbelts or open space within their boundaries and on the periphery of the UGA to provide separation from adjacent urban areas, rural areas, and resource lands;

i. Should consider the vision of each jurisdiction regarding the future of their community during the next 20 years;

j. Are large enough to ensure an adequate supply of land for an appropriate range of urban land uses to accommodate the planned growth; and

k. Support pedestrian, bicycle and transit compatible design.

<u>Centers and Compact Urban Communities</u>

DP-9. Local plans should identify centers as designated by the Regional Growth Strategy presented in VISION 2040. Jurisdictions in which regional growth centers and manufacturing and industrial centers are located shall provide land use policies and infrastructure investments that support growth levels and densities consistent with the regional vision for these centers.

DP-10. The County and cities shall coordinate the designation and planning of urban centers with transit service and other providers to promote well-designed and transit oriented developments that

enhance economic development opportunities, address environmental goals, and reduce vehicle miles traveled.

Consistency: Redesignation of this site would allow mixed use development and would provide additional capacity for additional population in the existing UGA without expanding the boundary.. The residential densities and employment capacity projected in the Alternative Action description can be supported by urban services, and would support transit services.

The Alternative Action would use land efficiently in the SW UGA consistent with this policy. The time needed for the conversion of the subject properties from an industrial use to a mixed-use development will allow time for coordination of capital facility planning with a variety of service providers and the provision of services to accommodate the projected population and employment capacity. Therefore, the Alternative Action is consistent with Policy DP-1.

Annexation Jurisdiction

At this time, annexation of the Point Wells site to an incorporated city is not part of the Alternative Action. However, since provision of services and facilities may be facilitated through eventual annexation to either Woodway or Shoreline, the relevant policies on annexation of the site are discussed below.

Both Woodway and Shoreline policies indicate the potential to annex the Point Wells site. The site is part of Woodway's MUGA, indicating that annexation to Woodway may be appropriate at some point in the future. That assumption is reflected in Woodway's policies, which are outlined below.

Shoreline has several adopted policies establishing a framework should annexation of the Point Wells site become an eventuality for the city. The site appears on Shoreline's Comprehensive Plan Land Use Map with the designation Potential Annexation Area.

The City of Shoreline has also adopted a Point Wells Subarea Plan in 2010 which clarifies that because the lowland portion of the Point Wells is presently connected to the regional road network only via Richmond Beach Drive and Richmond Beach Road in the city, future redevelopment of the lowland area would be most efficiently, effectively, and equitably provided by the City of Shoreline.

General Policy Plan Policies IC 1.B.3 and 1.B.4 state that the county shall seek interlocal agreements with the cities to establish a process for transferring authority over pending projects, permits, and records and establishes reciprocal impact mitigation for transportation, parks, and schools prior to potential or planned annexations or incorporations. The policy also indicates that the County will not support annexation of unincorporated Snohomish County by a jurisdiction situated predominately outside the County unless there is an interlocal agreement established with Shoreline and the County. Such agreement shall address and substantially resolve issues of land use, applicable development regulations, permit processing, public services delivery, facilities financing, transportation planning, concurrency management, solid waste management, and any other similar jurisdictional issues identified by the county. Such agreement should be approved prior to city acceptance of an annexation petition.

Shoreline does not currently have an annexation-related interlocal agreement with the county. Eventual annexation, however, is not subject to county approval. The purpose of these policies is clearly to provide for an orderly transfer of service responsibilities and is not intended to change the Growth Management Act (GMA) policy in RCW 36.70A.210(1) that recognizes counties are regional governments within their boundaries, and cities are primary providers of urban governmental services within urban growth areas.

Future annexation of Point Wells by one of the adjacent cities is clearly consistent with the GMA.

Affected Plans and Policies–Shoreline 1998

Shoreline Master Program (SMP)

The City of Shoreline is in the process of updating the SMP and has a draft program recommended for adoption by the Planning Commission Recommendation in March 2012. Because the program has not yet been reviewed by the Washington State Department of Ecology (Ecology) it does not yet qualify as part of Shoreline's recognized SMP.

The draft program includes specific designations and policies for Point Wells:

> Point Wells Urban Environment (PW). The purpose of this designation is to accommodate higher density uses while protecting existing ecological functions and restoring ecological functions that have been degraded.
>
> Point Wells Urban Conservancy Environment (PWC). The purpose of this designation is to distinguish between differing levels of potential and existing ecological function within the Point Wells environment, and regulate uses and public access requirements appropriately.

The range of uses proposed under the county's Urban Village designation are generally consistent with allowed uses specified in Table 20.230.081 Permitted Uses and Modifications within the Shorelines. Specific standards would apply to uses within Shoreline Management Act jurisdiction which is generally within 200 feet of the Ordinary High Water Mark of Puget Sound.

However, the goals and policies relevant to the Alternative Action are included below as a guide to development of the updated SMP (expected in 2009) as well as an indication of Shoreline's desires for development of the Point Wells site.

Goal SM I. To allow for a diversity of uses within the shoreline area consistent with the different character of various shorelines within the city, and to preserve and enhance the natural and aesthetic quality of important shoreline areas.

Policy SM 4. Encourage multiple uses in Urban-High Intensity environments, which enhance the public's use and enjoyment of the shoreline.

Goal SM II. To encourage a variety of uses which provide amenities to the community, economic development, and public access to the shoreline in Urban-High Intensity designated areas.

SM12. Use the following criteria if Point Wells is annexed and proposed for redevelopment:

- Consider a mix of commercial, residential, recreational and industrial water oriented uses.
- Ensure public access and amenities.
- Ensure adequate infrastructure.
- Protect views of the shoreline from nearby upland uses.
- Ensure clean-up of any hazardous materials.
- Minimize impacts on adjacent shoreline and neighborhood uses.
- Allow flexible site design to meet these criteria and to minimize development impacts.

Consistency: Although the policies of Shoreline's SMMP would apply only if the Point Wells site were annexed to Shoreline, they are included here to demonstrate that Shoreline would expect the Point Wells site to be redeveloped as a mixed use. However, there is not enough information at this point to determine if the Alternative Action would be entirely consistent with Shoreline's SMMP goals and policies.

Comprehensive Plan

Land Use Goals and Policies

Goal LU II. Annex unincorporated areas of the County that are within Shoreline's Potential Annexation Area.

LU17. The Mixed Use designation applies to a number of stable or developing areas. This designation is intended to encourage the development of pedestrian oriented places, with architectural interest, that integrate a wide variety of retail, office and service uses with residential uses. This designation should be reflected in zoning and development standards that achieve transition between adjoining uses of different intensities. Transition can be accomplished through appropriate design solutions or, alternatively, through decreased density or intensity.

Depending on the circumstances, appropriate zoning for the area may include, Neighborhood Business, Community Business, Office, Mixed Use Zone, Industrial, R-8, R-12, R-18, R-24 and/or R-48.

Consistency: The Alternative Action would allow the development of a mixed use area. The County implementing a PCB zone allows similar uses as the suggested Shoreline zones, with the exception of Industrial, which is not an allowed use in PCB. There is not enough information to determine if the development allowed with the Alternative Action would be consistent with the other criteria of the Mixed Use designation.

LU53. Consider the Point Wells area as a logical Potential Annexation Area due to its public road access through the Richmond Beach neighborhood, its contiguous boundary, its use of Shoreline-based public services, and potential development impacts on Shoreline.

Consistency: The Alternative Action does not consider annexation; however, this Draft SEIS analyzes traffic impacts on Shoreline, recognizing the relationship between the Paramount site access and the roads in Shoreline.

LU56. Ensure that property owners in the Potential Annexation Areas are invited to participate in discussing proposed land use, shoreline management, and zoning changes for the annexation areas.

Consistency: Residents of the Shoreline area were invited to a scoping meeting to discuss the topics analyzed in the SEIS and will have further opportunities to comment on the SEIS and on future development applications. The Alternative Action is consistent, to date, with LU56.

Transportation Goals and Policies

Goal T X. Coordinate the implementation and development of Shoreline's transportation system with our neighbors and regional partners.

T25. Work with Sound Transit to study the development of a low impact commuter rail stop in the Richmond Beach/Point Wells area. The Richmond Beach residents shall be involved in the decision-making process as far as location, design, and access to the service.

T67. Develop interlocal agreements with neighboring jurisdictions for development impact mitigation, coordination of joint projects, and management of pass through traffic. Consider annexing the sections of NE 145th and NE 205th Streets that are adjacent to the city. Work with adjacent jurisdictions and stakeholders to jointly study the 145th, 205th and Bothell Way NE corridors to develop level of service standards as part of a plan and funding strategy for future improvements.

T69. Pursue methods of reducing the impact on Richmond Beach Drive at the King/Snohomish County line (e.g., closing) if the Point Wells property is not annexed by Shoreline. Consider the extension of 205th only as potential mitigation for future development of Point Wells.

Consistency: This addendum analyzes potential impacts on Shoreline roads and traffic that could result from the Alternative Action. Future development on the site would be required to provide detailed traffic studies to determine effects on roads and air quality as well as to coordinate with surrounding jurisdictions, including Sound Transit. Although the Alternative Action may be consistent with the policies from a programmatic standpoint, not enough information is available at this point to determine complete consistency.

4.14.4 Mitigation Measures

For the Alternative Action to achieve consistency with the County's SMMP Urban Environment Management Policies, the County could adopt the following mitigation measure:

- Require permanent public access to a shoreline of statewide significance as part of any new multifamily residential, commercial or mixed use development.

For the Alternative Action to achieve consistency with the County's objectives and policies, the County has amended policies in Section 2.

For the Alternative Action to achieve consistency with Woodway's goals and policies, the following could occur:

- Coordinate between the County and Woodway regarding planning and regulations and an interlocal agreement would need to occur to be consistent with LUG-10, LUP-18 and LUP-19.
- Establish urban-level services to be consistent with LUG-4 and LUP-1.
- Woodway could amend LUP-20 and LUP-21 to designate the Point Wells site as mixed use.

For the Alternative Action to achieve consistency with Shoreline's goals and policies, the following could occur:

- Coordination with Shoreline at the development phase to assess the impact of new development on the transportation system, including mitigation and funding, and work with the city to provide an appropriate classification for Richmond Beach Drive between NW 199th Street and NW 205th Street as a local road in Point Wells Policy PW 12. The policy indicates, however, that the city could reclassify the road segment after review of a Transportation Corridor Study and Mitigation Plan called for in Policy and commitment of financing for necessary mitigation.
- The affected jurisdictions could jointly determine transportation strategies

4.14.5 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to plans and policies are anticipated with either the Alternative Action or the 2009 Proposed Action